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PROMOTING THE HEALTH OF ALBERTANS

Alberta

COMMUNITY AND
OCCUPATIONAL HEALTH

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PROMOTING THE HEALTH OF ALBERTANS:

A Study of Practices, Attitudes and Beliefs Impinging on Chronic Disease Prevention

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EXECUTIVE SUMMARY

In June 1985, Statistics Canada carried out the Health Promotion Survey (HPS) for the federal Department of Health and Welfare. The major objective of the study, which covered all ten provinces as well as the Yukon, was to collect information on the knowledge, attitudes and behaviours of Canadians concerning health promotion issues. This was the first HPS conducted in the country. Federal government staff were responsible for constructing, validating, piloting and administering of the questionnaires. In April 1986, Alberta along with other provinces received the HPS microdata tape from Statistics Canada. The data pertaining to the province constitute a baseline of information on various aspects of personal health behaviour and norms of Albertans, and form the basis of this report.

Given the diversity of issues included as well as the general lack of provincial level information concerning the prevalence of many of the health associated behaviours and attitudes, the primary aim of the analysis presented in this report is to document such factors within a broad conceptual framework. As this framework (figure 1) indicates, the major findings of this report can be summarized under the following areas:

- Behavioural Risk Factors
- Health Promoting Behaviours and Attitudes
- Subjective Health
- Environmental Factors

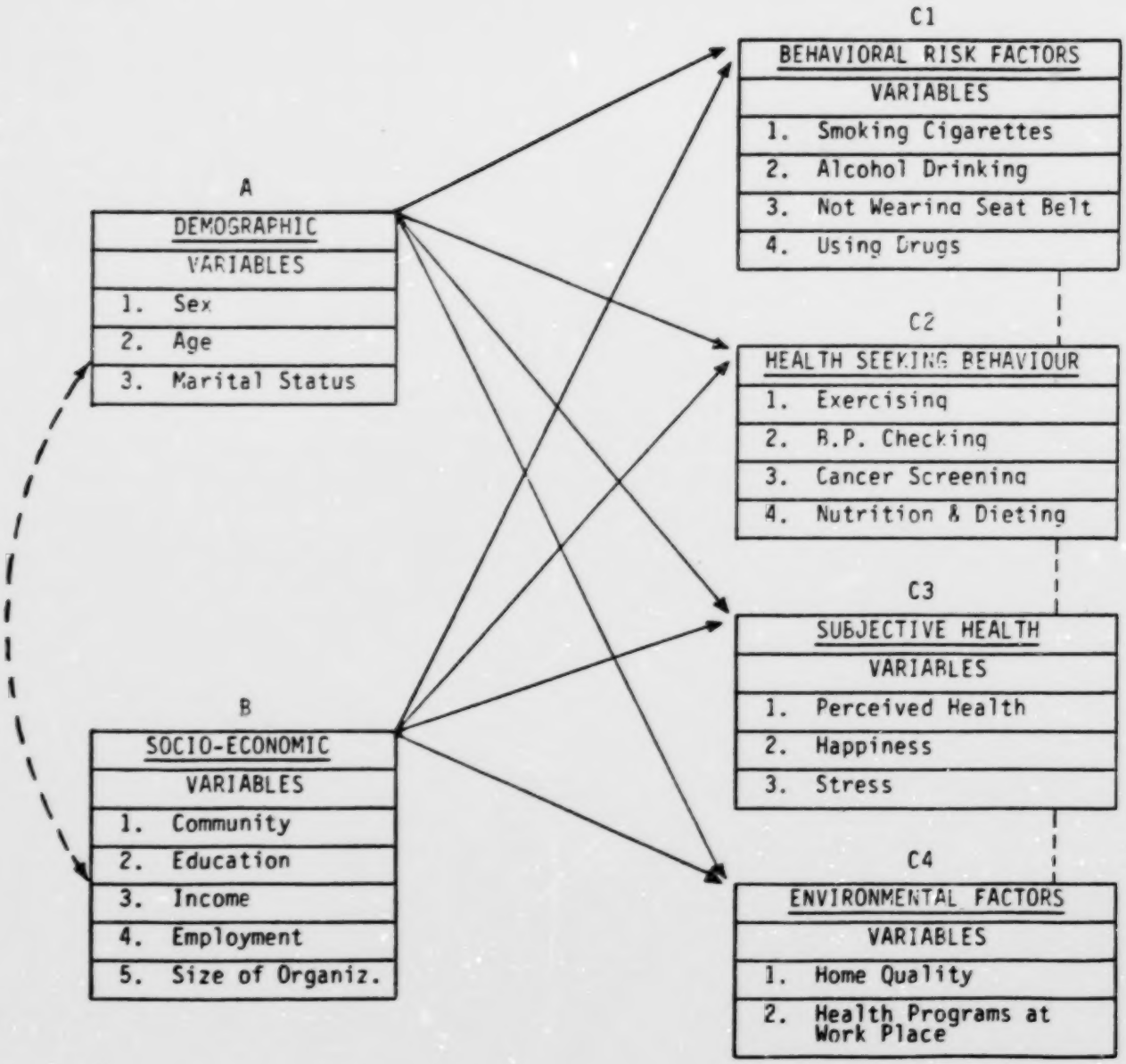
The analysis of the results focuses on the impact of selected socio-demographic factors on variables within each of these dimensions within the realm of public health.

BEHAVIOURAL RISK FACTORS:

It is generally recognized that the major behavioural risk factors in high technology communities are cigarette smoking, not using seatbelts regularly, and a regular use of alcohol and drugs.

Figure 1

The Social-Demography of Health Promotion and Prevention (Dependent Factors)



- Smoking: Cigarette smoking is the single most preventive health risk in our time. In spite of the overwhelming evidence concerning the harmful effects of this habit, almost one in three Albertans surveyed smokes. The results show that among the younger age groups, and especially among teenagers, more women than men smoke cigarettes.

  There is also clear evidence to suggest that support for anti-smoking actions is very high. Thus a good majority of Albertans would like smoke-free areas provided at work.

- Alcohol Use: The pattern of alcohol consumption in the province is similar to that observed in Canada as a whole. Overall, Albertans exhibit responsible attitudes toward drinking.

  One area of concern is the higher proportion of current drinkers among teenage females in Alberta when compared to males. Regular drinking among young males (20-24) in Alberta also appears to be high.

- Seatbelt Use: More than three-quarters of all Canadians wear seatbelts regularly while riding in a car, but only one in three Albertans practice this healthy habit.

  The prevalence of such regular use among elderly Albertans is lower than the general population provincewide. In the nationwide sample, on the other hand, seatbelt use among the elderly was higher than that of the general population. The results also show that seatbelt use is significantly lower at the lowest socio-economic levels. Thus, those Albertans who can least afford to indulge in this risky behaviour, are the ones more likely to choose this option.

- Drug Use: A large majority of the survey population in Alberta reported not using most of the drugs considered in this survey. The results show that the demographic patterns of drug use in the province are similar to those observed for Canada as a whole.

The findings suggest that women are more likely to use sleeping pills and tranquilizers. The use of these drugs is also higher among the elderly. Marijuana or hashish appears to be the most popular drug in Alberta, and its use is slightly higher in this province, when compared with Canada as a whole. It is also noteworthy that there is a greater prevalence of other behavioural risk factors such as cigarette smoking and alcohol use among the users of this drug.

The results of this survey clearly indicate that the interaction of multiple risk factors such as smoking, drinking, failure to use seatbelts, and use of drugs such as marijuana and hashish is significant and warrants increased attention.

HEALTH SEEKING BEHAVIOUR AND ATTITUDES:

Regular exercise, periodic checking for high blood pressure, cancer screening among women and maintaining good nutritional habits are all important aspects of improving and maintaining a person's health.

° Exercise: Almost two out of three Albertans exercise at least three times every week. In this regard both males and females in this province compare favourably to their counterparts in Canada as a whole. Alberta estimates for regular exercise among the elderly are also higher than national estimates.

More than one half of Albertans (55%) feel that they get less exercise than they need. The results thus suggest that the majority of Albertans are well aware of the need to exercise regularly. It is also interesting to note that only a small minority (25%) of Albertans who lead a sedentary life style believed that more exercise would improve their health significantly.

° Checking Blood Pressure: An estimated 93% of Albertans have had their blood pressure checked sometime in the past. Among those who have had

their blood pressure checked, 8% (151,000 Albertans) say that they have high blood pressure.

It is important to note that almost one out of three (31%) with reported high blood pressure does nothing specific to control it. This translates into about 47,000 Albertans.

The findings suggest that almost three quarters of adult Albertans had their blood pressure checked within the year preceding the survey. Among the general population this estimate for the province is similar to that observed for the country. However, the results suggest that males in Alberta, when compared to males in Canada as a whole, were less likely to have had their blood pressure checked within the previous year. This is particularly the case among the youngest and the oldest males surveyed from the province.

Another important finding is that among Albertans who never had their blood pressure checked - or those who did not know when they had it checked last - almost one-half (47%) believe that they need to have such checks only if they encounter health problems.

- Cancer Screening Among Women: Among Alberta women surveyed, 68% had a Medical Breast Examination (MBE) during the previous year, and this compared favourably to the national estimate of 65%. The results also show that 77% of women in Alberta have been shown how to carry out Breast Self Examination (BSE). The corresponding estimate for Canada is 75%.

It is also noteworthy that a higher proportion of women in Alberta, when compared to the nationwide survey population, carried out BSE every month; the figures being 43% and 38% respectively. Moreover, the data show that one in six women (17%) in the province never practiced BSE, which again compared favourably to the Canadian estimate of 24%.

The results also suggest that women in Alberta, when compared to women in Canada as a whole, were more likely to have had a PAP test within the

previous year. Moreover, the proportion who have never had a PAP test was also lower in Alberta compared to Canada.

It should also be noted that women who reported having had an MBE in the previous year were more likely than those who did not have such a medical examination to have had a PAP test in the same period. Overall, women in Alberta compare favourably to women nationwide in their cancer screening practices.

° Nutrition and Dieting: A good majority of Albertans believe that they can improve their health by changing their eating habits.

The intent to improve eating habits, however, was only held by a small minority (13%). More importantly, the results also indicate that the belief that changing eating habits plays a significant role in health improvement tends to decline with age. Thus only about one in three elderly Albertans (37%) holds such a belief.

The data also suggest that the proportion of overweight people in Alberta is similar to that observed in Canada. However, being overweight tends to be more common among Albertans with the lowest level of education and income when compared to those at higher socio-economic levels.

In general Albertans appear to regard good nutrition and eating habits as a significant aspect of a healthy life style. There also appears to be a need for more information on nutrition among the survey population of this province. Nutrition was the topic mentioned most often by persons who wanted more information on health related topics (53%).

SUBJECTIVE HEALTH:

Three factors associated with the subjective dimension of individual health were given special attention in this analysis: perceived health status, happiness and stress.

- Perceived Health Status: Almost two out of three Albertans (61%) believe that their health is excellent or very good compared to their peers.

  In general, perceived health status deteriorates with age. On the other hand, perceived level of individual health status appears to improve with the level of education and household income.

- Happiness: Overall, 38% of Albertans consider themselves very happy, but more women (42%) than men (34%) consider themselves very happy.

  The results also suggest that senior citizens in Alberta, when compared to seniors in Canada as a whole, appear to be less happy . Thus, while 38% of those aged 65 and over in Canada reported that they were extremely happy, only 25% of Albertans in the same age group did so.

- Stress: The findings of the survey indicate that the reported level of stress in the province is not significantly different from that observed in the country as a whole. In the population overall, men appear to lead more stressful lives compared to women. However, among teenagers and the elderly, the opposite type of association is indicated, with women describing their lives as stressful more often than men. In general, the level of stress appears to increase with socio-economic status.

  More importantly, it should be noted that though there is a tendency to readily identify stressful life situations, there is also a general lack of intent to change such situations.

ENVIRONMENTAL FACTORS:

The analysis pertaining to environment related health factors focuses on the availability of safety devices at home and the awareness of workers concerning the availability of health protection and promotion programs at work.

- Health and Safety Equipment at Home: Almost three quarters (72%) of Albertans report that they have first aid kits at home, an estimate almost

identical to that observed for Canada. Smoke detectors are present in the homes of 82%, whereas the presence of fire extinguishers is reported by only 55%. As far as the availability of such safety equipment is concerned, Alberta estimates compare favourably to Canadian estimates. Elderly Albertans when compared to middle aged Albertans are less likely to be living in homes equipped with smoke detectors .

° Health and the Workplace: Even though a majority of workers in Alberta believe that their place of work is an appropriate area to promote good health habits, a significant proportion of workers (46%) are not aware of any safety and accident prevention programs available at work. A majority of workers are also unaware of any other types of health promotion programs offered at the workplace.

Women workers in the province are more likely than their male counterparts to be aware of the availability of such programs. In the realm of workers' awareness concerning the availability of health protection and promotion programs at work, the estimates for Alberta are somewhat lower than for Canada. The results also indicate that workers in Alberta do not place a great deal of emphasis on the role of government in dealing with work accidents.

CONCLUSION:

The report concludes by identifying some of the limitations of the method and data used in the study. Such limitations are, however, relatively small and the estimates related to the prevalence of health behaviours and attitudes would help to identify issues for priority attention. Knowledge concerning characteristics is useful to locate target groups for health promotion efforts. Given the complexity and comprehensiveness of HPS, further analysis may be warranted to prepare technical reports on some of the special areas covered in the study.

Health and Welfare Canada plans to repeat the survey in approximately three years to evaluate federal health promotion programs initiated in different regions. Such future studies would also be helpful in the continued monitoring of various attitudes, beliefs and practices of Albertans in the realm of public health.

ACKNOWLEDGEMENTS

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Internally, the preparation of this report was guided by the Interdepartmental Technical Advisory Committee on the Alberta Health Promotion Survey consisting of:

L. Charach: Former Director, Division Support, Community and Occupational Health; now Director, Planning and Analysis, Transportation and Utilities

C. Charles: Manager, Policy Development Division, Hospitals and Medical Care

J. DeVries: Director, Financial Services, Alberta Culture

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J. Schmidt: A/Director, Rehabilitative Programs, Community and Occupational Health.

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1. INTRODUCTION

The primary objective of the Department of Community and Occupational Health is to maintain and improve the health and safety of Albertans. This focus on promotion and prevention suggests that the health status of a community such as the province of Alberta is determined by a variety of interdependent factors. Such factors fall into four broad dimensions: life styles and behaviours, environment, health care organization and human biology as reflected in the demographic structure of the community.

In December 1984 Community Health produced a report entitled 'A Perspective On The Health Of Albertans'. That report[1] provided a picture of the health status of the province from a macro demographic perspective and described the trends in many health indicators and descriptors. A natural extension of that analysis would be to look at the health status of Albertans from a micro-sociological viewpoint. Such an examination is all the more important since the significant aspects of health care today are the concerns with wellness and self responsibility.[2] The facets of being healthy today reflect personal awareness of self-actualization in physical exercise, nutrition, stress management and overall individual life styles and behaviours.

There is a definite shift from infectious to chronic disease structure in modern societies. Moreover, the role of personal health behaviour and attitudes in the development of chronic diseases and injuries is generally recognized. In the public health field, priority is given to factors that are controllable and preventable. A substantial portion of morbidity and premature mortality could be attributed to such factors. Among the diverse number of factors which have been studied over the past twenty years are: high cholesterol levels, high blood pressure, industrial and urban pollution, alcoholism, smoking, obesity, sedentary lifestyles and refusal to wear seatbelts.[3] Persons exposed to such factors experience major health problems earlier than others and die younger. It is therefore important to know their numbers and the proportion they constitute of the total population.

The prevalence of risk factors can only be obtained by surveying the population. The Smoking Behaviour Survey in Canada[4], the 1970-72 study of nutrition in Canada[5] and the Canada Health Survey[6] are a few examples of such studies carried out in this country. As important as these lifestyles and behaviours and their concomitant risk dimensions are, no systematic data concerning their prevalence in the province of Alberta currently exist.

In April 1986, Alberta along with other provinces received the Health Promotion Survey (HPS) microdata tape from Statistics Canada. The aim of HPS was to collect information on the knowledge, attitudes and behaviour of Canadians concerning health related issues. The data relating to the province of Alberta constitute a baseline of information on various aspects of personal health behaviour and attitudes of Albertans, and form the basis of this report.

The purpose of this report is to provide a general picture of the practices, attitudes and beliefs among Albertans which impinge on healthy lifestyles. The next section of the report presents the background of the survey and briefly describes the methodology and technique of data collection and estimation procedure employed in the study. Section three compares the socio-economic characteristics of Alberta's survey population with those of the country as a whole.

The major findings of the survey are presented in section four organized under the following topics: smoking, alcohol use, seat belt use, drug use, exercise, high blood pressure, cancer screening among women, general health perception, stress, nutrition and dieting, first aid safety in the home and health and the workplace. In the fifth and final section, some of the limitations of the survey are noted and suggestions for further use of HPS data are offered.

2. BACKGROUND OF THE SURVEY

The Health Promotion Survey was conducted by Statistics Canada for the Department of Health and Welfare. It was carried out during June 3 - 21, 1985 and covered all ten provinces as well as the Yukon. The major objective of the study was to collect information on the knowledge, attitudes and behaviour of Canadians concerning health promotion issues.

The Department of Health and Welfare was interested in collecting this information to assist them in planning programs to encourage Canadians to adopt and maintain healthy life styles[7]. This was the first Health Promotion Survey (HPS) conducted in the country with the intention of developing baseline data on current health related attitudes and behaviours. It is planned that the study will be repeated in approximately three years to evaluate programs initiated by Health and Welfare Canada.

2.1 SURVEY DESIGN AND DATA COLLECTION

The target population for the survey was all persons 15 years of age or older living in Canada with the following exceptions:

- residents of Northwest Territories
- full-time residents of institutions.

Since the technique of data collection used for the HPS was random digit telephone dialing, households without telephones were, naturally, excluded from the interviews. However, Statistics Canada estimates showed that this accounted for less than three percent of the total population. Moreover, in the estimates derived from the survey data, adjustment procedures using special weighting schemes were also used to include persons without telephones[7].

Staff from the Health Promotion Directorate of Health and Welfare Canada were responsible for constructing, validating, piloting and administering the questionnaire used in the study. A screening document (see Appendix I) was used for each telephone number called by the interviewers. The purpose of this document was to first ascertain whether or not the number called

reached a household, and then to list all the members within the household. From this list one person 15 years of age or over was selected at random. The interview was then conducted with the selected person by telephone. If the selected individual was not available at the time of contact, arrangements for a convenient call back were made. All interviews were carried out using this strategy and no proxy reporting was accepted.

The survey instrument consisted of 109 questions, the majority of which gathered opinions on a variety of health related topics (see Appendix I - b). Interviews in Alberta were conducted from Statistics Canada's regional office in Edmonton. The telephone survey was carried out between 8:30 a.m. and 9:30 p.m. during weekdays and during the day time on Saturday. Trained interviewers under the supervision of Statistics Canada staff were used to complete the survey. In Alberta a response rate of 81% was obtained which represented 2733 respondents.

2.2 DATA PREPARATION AND WEIGHTING PROCEDURES

After data capture was completed in the respective regional offices of each province, survey records were transmitted to Statistics Canada's Ottawa office for checking and preparation for computer based editing and creation of the microdata tape. This tape was then made available to the province for analysis.

All survey records were subjected to an exhaustive edit procedure using the computer facilities of Statistics Canada. This involved checking partial non-responses, flow pattern errors, and abnormally high or low responses. Imputing from other areas of the same questionnaire, cases with missing or incorrect data were assigned appropriate codes wherever feasible.

The representativeness of the sample with respect to such variables as age, gender and telephone access was first ascertained using a two stage sampling design. The first stage sampling units (primary sampling units) were banks of telephone exchanges; the second stage units were actual telephone numbers corresponding to households within those banks.

The procedures employed as the basis to assign case weights to each record and the steps used by Statistics Canada to weight the survey records were the following:[7]

- In the first stage of weighting all households that were selected into the sample within a given province were assigned an identical weight.

- Secondly, the weights for households with more than one private telephone number were adjusted downwards to account for the fact that such households have a higher probability of being selected.

- The weights for responding households (i.e. the records on the file) were adjusted upwards to account for non-responding households. This adjustment was done independently within CMA/NON-CMA geographical classifications within each province. Weights were also adjusted when fewer than the required number of telephone numbers were generated within an area because of the survey period ending. This adjustment is based on the assumption that the households that were interviewed represent the characteristics of those that should have been interviewed. To the extent that this is not true, the estimates produced will be somewhat biased.

- A person weight was then calculated for each person who responded to the survey by multiplying the household weight for that person by the number of persons in the household who were eligible to be selected for the survey.

- In the last stage of weighting, the person weights were ratio adjusted to agree with Census projected age-sex distributions. Census projected population counts were obtained for males and females within each province and the Yukon for the following seven age groups: 15-19, 20-24, 25-34, 35-44, 45-54, 55-64, and 65+. For each of the resulting 154 classifications (11 x 2 x 7), the person weights for records within the classification were adjusted by multiplying by the following ratio:

$$\text{Ratio} = \frac{\text{projected census population count}}{\text{sum of the person weights of records in the prov-age-sex group}}$$

It should be noted here that case weights differ from province to province. These weighting factors assigned to each case are used to arrive at estimates of proportions, percentages and population figures shown in this report.

2.3 RELEASE POLICY AND DATA RELIABILITY

In providing the results of analysis pertaining to Alberta, this report strictly follows the weighting and estimation policies and guidelines developed by Statistics Canada. Thus, the estimates derived from the survey are based on a sample of households.

"Somewhat different figures might have been obtained if a complete census had been taken using the same questionnaire, interviewers, supervisors, processing methods, etc. as those actually used. The difference between the estimate obtained from the sample and the results from a complete count taken under similar conditions is called sampling error of the estimate."[7]

As far as this sampling error is concerned, the table provided by Statistics Canada has been used to determine the coefficient of variation of all estimates given in this report (see Appendix II). This coefficient is basically the standard error of the estimate divided by the estimate itself and expressed as a percentage.

Guidelines for releasing and/or publishing any estimates from the micro-data tape were also developed by Statistics Canada. The following framework indicates the policy used in reporting the estimates:

	Type of Estimate	Value of Co-efficient of Variation (C.V.) in %	Notation Used	Policy Statement
1.	Unqualified	0 - 16.5	None	Estimates can be used for general unrestricted release.
2.	Qualified	16.6 - 25.0	*	Estimates can be considered for release. The * denotes high sampling variability associated with the estimates.
3.	Restricted	25.1 - 33.3	**	Given the very high sampling variability associated with the estimates, the results should be interpreted with great caution.
4.	Not to be released	33.4 or over	***	Estimates are not released under any circumstances. In tables no such estimates are shown.

The results presented in this report follow the above mentioned policy. Appropriate notations are indicated whenever estimates are presented. For example, one asterisk is shown whenever the estimate presented is of Type 2 or qualified. Similarly, whenever the estimate is Type 3 (Restricted) two asterisks and in the case of Type 4 (Not to be released) 3 asterisks are shown for the results provided in the text.

In discussing the findings of this study, references are made to both Albertans and survey population. In all such instances these terms mean the population represented by those who were interviewed for the survey.

Limitations of the Survey Data

Albertans without a fixed address or access to a telephone were not included in the survey. Similarly, as indicated earlier, institutionalized individuals were also excluded. Statistics Canada indicated that bias due to lack of

telephone coverage would be minimal[7]. However, a small degree of bias is likely in some areas due to the exclusion of the institutionalized population.

Though the survey instrument used in the study was pretested and properly modified, no reliability measures have been reported. The existence of errors due to non-response, incorrect information or improper data capture, coding and processing is difficult to ascertain and rectify. However, such mistakes tend to be random in nature and as such lead to very little bias. Moreover, since Statistics Canada routinely administers a number of similar surveys, it is reasonable to assume that procedural errors were small.

3. SOCIO-ECONOMIC CHARACTERISTICS OF THE SURVEY POPULATION

To a large extent, health related attitudes and behaviours within a community are closely linked to its demographics and socio-economic composition. It is essential therefore to have a general picture of such characteristics of the population before examining the prevalence of lifestyle related risk factors as well as the patterns of attitudes and behaviours related to health promotion issues.

3.1 DEMOGRAPHIC STRUCTURE

The estimated sex-age distribution of Alberta in comparison with the national estimate is shown in table 3.1.1. There is a higher proportion of males (50.4%) than females (49.6%) in the province. The opposite pattern is observed in the country as a whole with 49.1% males and 50.9% females. Moreover, irrespective of gender, the survey population of the province is younger than that of the country. Thus, 41.1% of Alberta males studied were less than 30 years old whereas the corresponding percentage for Canada was 34.2%. Among females, 37.7% in Alberta were less than 30 years old, while only 32.7% of females in the national survey population belonged to this age group. The difference in the social age of the province is also vividly reflected when proportions of the older population are compared. Among males in Alberta, only 11.7% were sixty years or older, whereas 16% of the males in the country as a whole belonged to this age group. Similarly the corresponding percentages for females were 15.7 for Alberta and 20.3 for Canada respectively. Chart 3.1.1 shows the estimated percentage distribution of age categories by gender for Alberta and Canada.

Table 3.1.2 shows the marital status distribution of the survey population for Alberta and Canada. A lower proportion of Albertans were married or living in common-law relationships when compared to Canada (59.4% and 61.6% respectively). The proportion of widowed individuals was lower in Alberta reflecting the younger social age of the province. The results also indicate that a slightly higher proportion of the survey population in Alberta was separated or divorced (6.1%), when compared to the national estimate (5.2%).

Table 3.1.1

SEX-AGE DISTRIBUTION OF SURVEY POPULATION:
ALBERTA AND CANADA
(Estimated % and Number)

MALES

AGE GROUP	ALBERTA As % of Males	ALBERTA As % of Total Pop.	ALBERTA Estimated Number	CANADA As % of Males	CANADA As % of Total Pop.
15 - 19	10.7	5.4	95,200	10.4	5.1
20 - 24	12.9	6.5	114,400	12.5	6.1
25 - 29	17.5	8.8	155,700	11.3	5.6
30 - 39	21.6	10.9	191,700	22.4	11.0
40 - 59	25.7	13.0	228,200	27.4	13.4
60+	11.7	5.9	103,500	16.0	7.9
ALL AGES	100.0	50.4	888,700	100.0	49.1

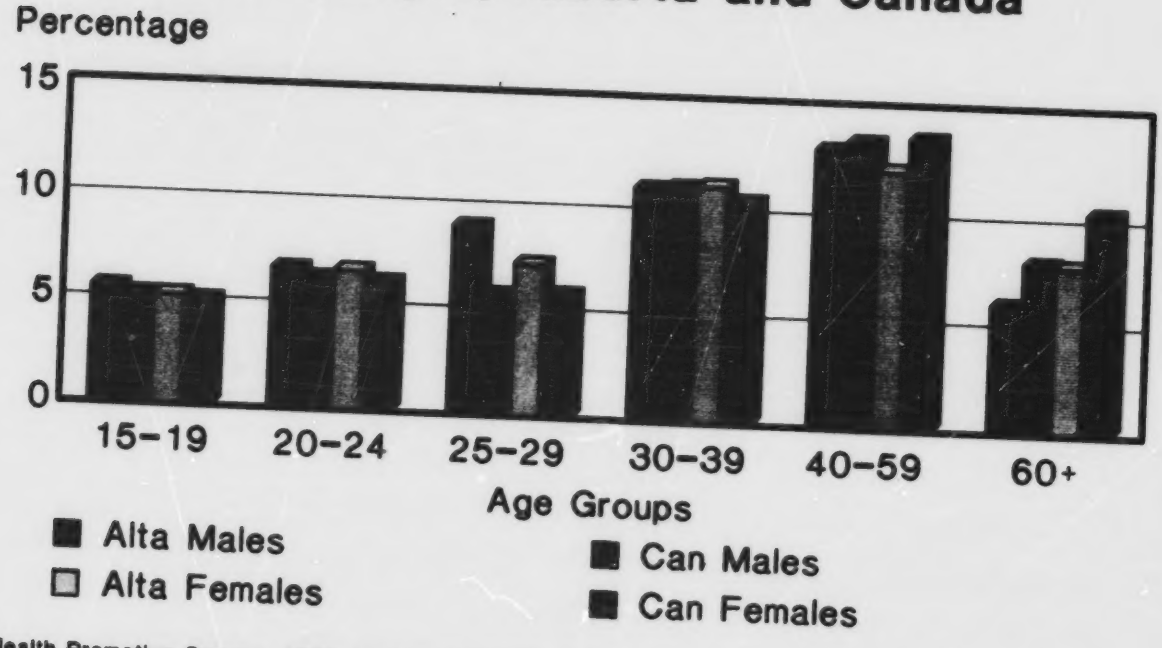
FEMALES

AGE GROUP	ALBERTA As % of Females	ALBERTA As % of Total Pop.	ALBERTA Estimated Number	CANADA As % of Females	CANADA As % of Total Pop.
15 - 19	10.4	5.1	90,500	9.6	4.9
20 - 24	13.1	6.5	114,100	11.8	6.0
25 - 29	14.2	7.1	124,200	11.3	5.7
30 - 39	22.3	11.1	194,900	20.4	10.4
40 - 59	24.3	12.1	212,500	26.7	13.6
60+	15.7	7.8	136,900	20.3	10.3
ALL AGES	100.0	49.6	873,200	100.0	50.9

Note: Totals rounded to 100.

Chart 3.1.1

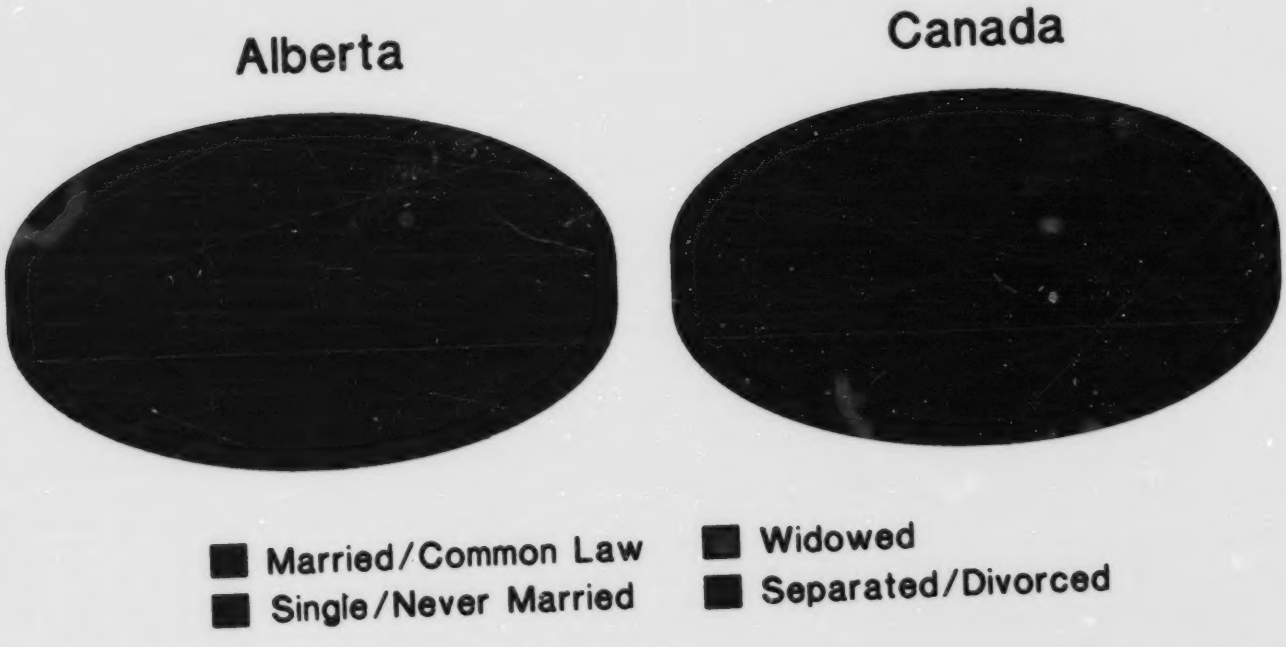
Age-Sex Distribution of Percentages as a Proportion of the Total Sample, Alberta and Canada



Health Promotion Survey, 1985 (Weighted Estimates)

Chart 3.1.2

Marital Status of Respondents



Health Promotion Survey, 1986

Table 3.1.2

MARITAL STATUS DISTRIBUTION

ALBERTA AND CANADA

(Estimated %)

Marital Status	ALBERTA (%)			CANADA (%)		
	Total Population	Male	Female	Total Population	Male	Female
Married/Common Law	59.4	55.7	63.3	61.6	62.2	61.0
Single/Never Married	30.0	37.5	22.3	27.2	30.9	23.6
Widowed	4.4	1.9*	7.0	6.1	2.6	9.4
Separated/ Divorced	6.1	4.9	7.4	5.2	4.3	6.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: Totals rounded to 100.

3.2 LEVEL OF EDUCATION

The survey respondents were asked about the highest level of education they have ever completed. Table 3.2 shows the estimated percentages for Alberta and Canada by five categories of education. A comparison of the results suggests that in general the level of education of the survey population in Alberta was slightly better compared to that of Canada. Thus, 63.5% of Albertans had completed secondary education or a higher grade of education, compared to 62.4% nationwide. More importantly an estimated 13.5% in Alberta had a university degree while only 11.5% achieved this level of education in the country as a whole. This pattern of higher educational level was observed among both males and females of the province when compared to Canada. It should be noted, however, that the differences in the estimates are small and as such sampling variability may be high. Therefore the results should be interpreted with caution.

Table 3.2

EDUCATION BY SEX, ALBERTA & CANADA

(Estimated %)

Completed Education	ALBERTA (%)			CANADA (%)		
	Total Population	Male	Female	Total Population	Male	Female
No schooling/ Elementary	10.4	11.9	8.8	12.2	11.5	12.8
Some Secondary/ Other	25.5	26.1	24.9	24.8	24.8	24.9
Completed Secondary	28.5	26.8	30.3	27.9	26.1	29.5
Any Com. College/ Some University	21.5	18.6	24.5	23.0	23.2	22.9
Completed University	13.5	16.1	10.9	11.5	14.0	9.1
Not stated	0.5	0.4	0.6	0.6	0.4	0.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: Total rounded to 100.

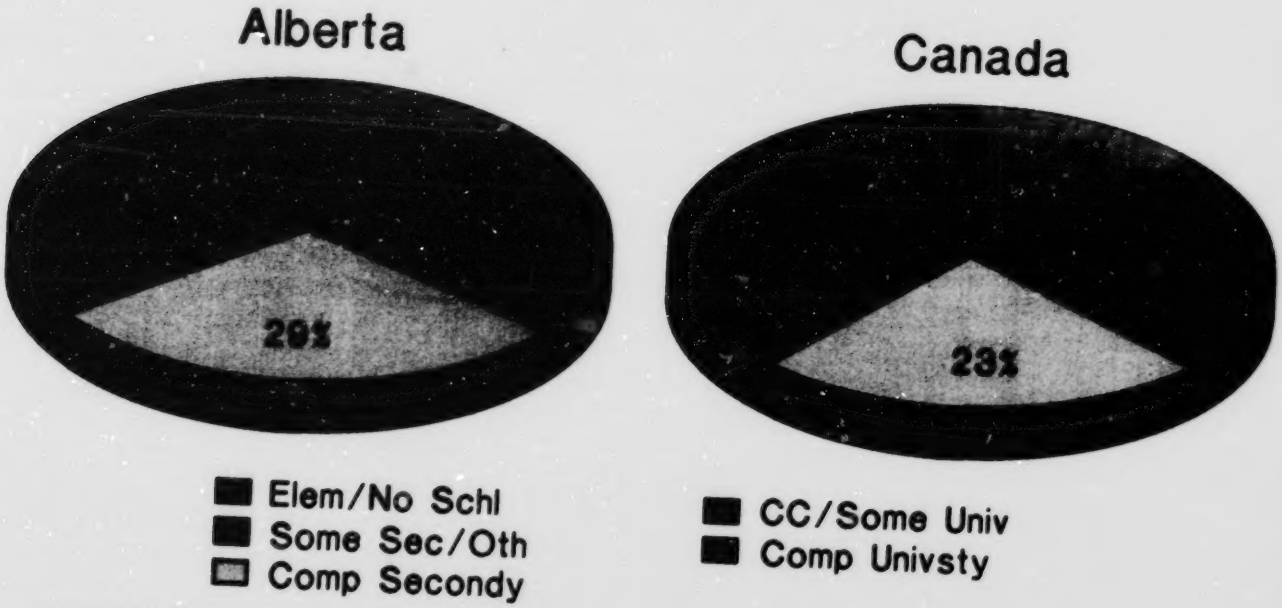
3.3 HOUSEHOLD INCOME

To gather information regarding household income, respondents were asked, "What was your household's total income from all sources before taxes and deductions for 1984?". Table 3.3 shows the estimated percentage distribution of household income for Alberta and Canada. As the table shows, almost one in three survey respondents either refused to state or did not specify their income. Refusal rate for this question was slightly higher in Alberta when compared to Canada - 38.6% and 35.9% respectively.

Among Albertans who reported their household income, about 18% had household incomes of 60,000 dollars or more during the year previous to the survey. In the nationwide sample only 12 % had similar income. The general pattern of income distribution as shown in Chart 3.3 suggests that the level of income of Albertans compared favourably with that of Canadians as a whole.

Chart 3.2

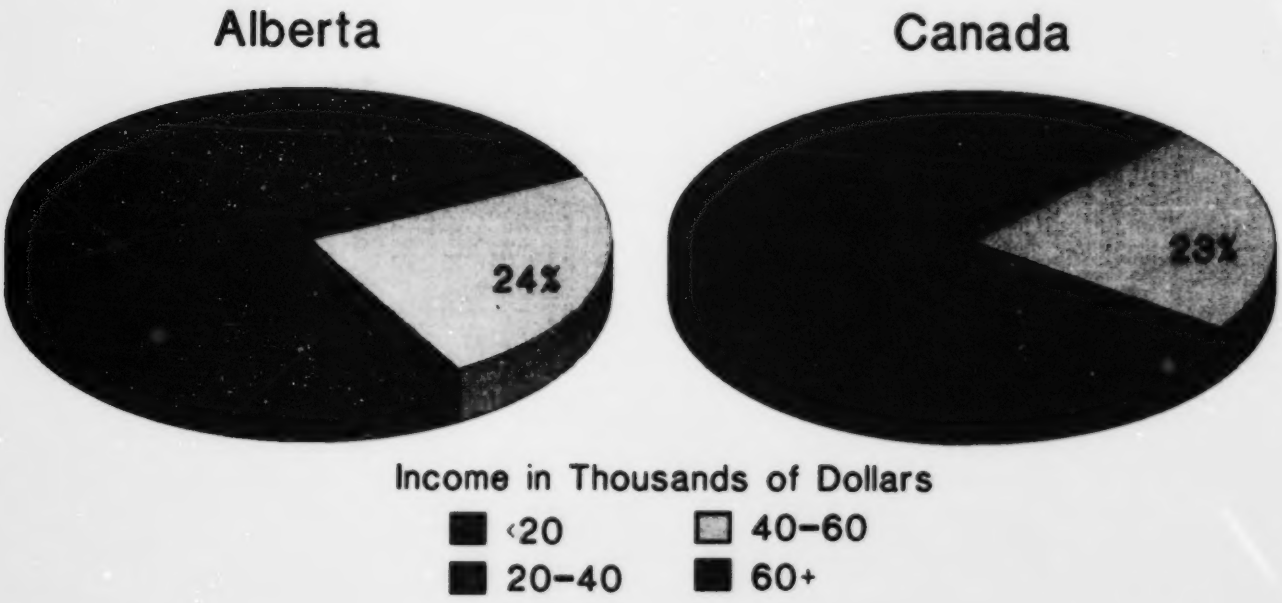
Highest Education Attained by Respondents



Health Promotion Survey, 1985

Chart 3.3.

Reported Household Income



Health Promotion Survey, 1985

Table 3.3

HOUSEHOLD INCOME BY SEX

(Estimated %)

Household Income ($)	ALBERTA			CANADA		
	Population	Male	Female	Population	Male	Female
Less than 20,000	12.7	11.5	14.0	17.0	15.2	18.0
20,001 - 40,000	23.4	25.0	21.8	25.1	28.3	22.1
40,001 - 60,000	14.5	16.7	12.2	14.5	17.3	11.8
More than 60,000	10.4	12.5	9.2	7.5	8.1	6.9
Not Stated/Refused	38.6	34.3	42.8	35.9	31.2	40.5
TOTAL	100.00	100.0	100.0	100.0	100.0	100.0

Note: Totals rounded to 100.

3.4 WORKING STATUS AND OCCUPATIONAL CHARACTERISTICS

The percentage distribution of the working status of the survey population for Alberta and Canada is shown in table 3.4.1.

Table 3.4.1

WORKING STATUS BY SEX, ALBERTA AND CANADA

(Estimated %)

Working Status	ALBERTA (%)			CANADA (%)		
	Total Population	Male	Female	Total Population	Male	Female
Housekeeper	15.5	***	30.7	17.5	***	33.9
Looking for Work	5.9	8.1	3.6	5.0	6.4	3.6
Student/Retired	21.4	22.5	20.2	22.8	24.9	20.8
Working	55.8	67.0	44.5	53.1	66.5	40.2
Other (including Not stated)	1.4	1.9	0.9	1.6	1.8	1.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: Totals rounded to 100.

The results show that the proportion in the labour force was higher in Alberta than in Canada. Thus, 61.7% of Albertans were either working or looking for work, compared to 58.1% in the national sample. A slightly higher proportion of Albertans were looking for work when compared to the estimate for the country - 5.9% and 5.0% respectively. When the distribution of working status among males and females in Alberta is compared with that of Canada it appears that unemployment was higher among males in the province than in Canada. Thus, 8.1% of males in Alberta were looking for work at the time of the survey when compared to 6.4% in Canada. Among Alberta females, the proportion looking for work was the same as that observed for the country.

The occupational characteristics of the survey population are shown in table 3.4.2. The occupational codes used in the survey were the standard occupational classifications developed by Statistics Canada[8]. The categories shown in the table were obtained by collapsing the standard codes as shown in Appendix III.

Table 3.4.2

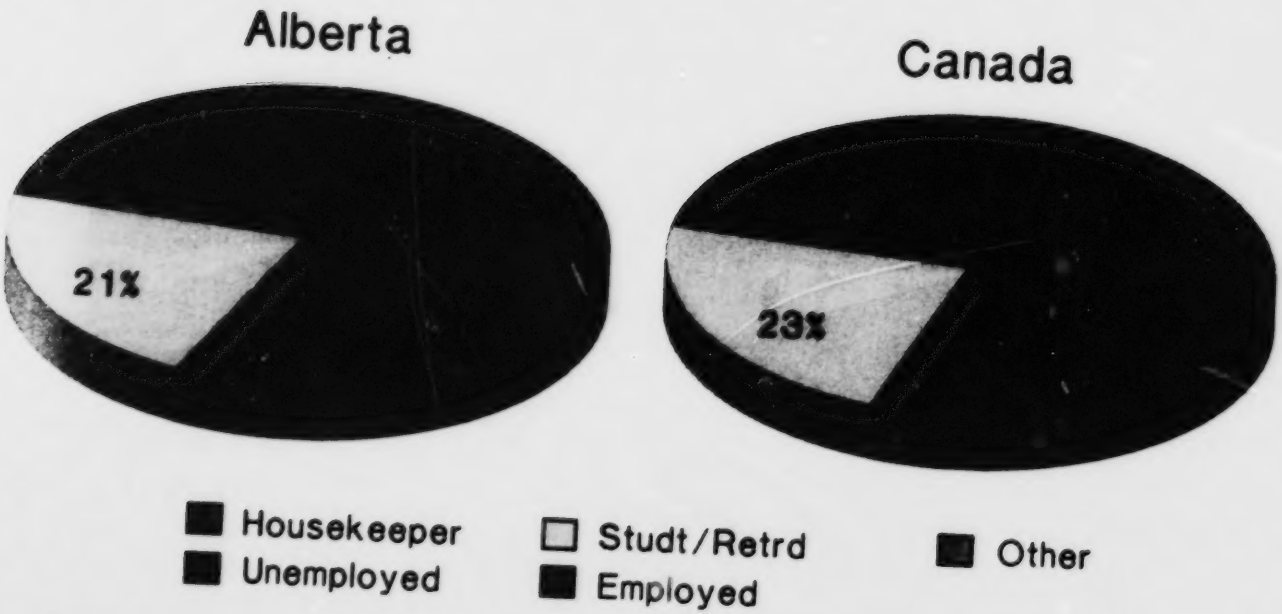
OCCUPATIONAL CLASSIFICATION BY SEX
ALBERTA AND CANADA
(Estimated %)

Occupational Categories	ALBERTA (%)			CANADA (%)		
	Total	Male	Female	Total	Male	Female
Management	9.2	12.3	6.1	7.4	10.9	4.0
Professional	10.9	11.9	9.9	9.5	9.9	9.2
Clerical	9.6	2.1	17.3	9.0	4.2	13.5
Sales/Service	10.0	10.4	9.6	11.1	11.8	10.5
Farming/Processing	5.5	9.9	1.0	4.2	7.5	1.2
All Other Occupations	15.1	27.3	3.0	15.4	26.7	4.8
Not in the labor force or Occupation not specified	39.6	26.2	53.2	43.1	29.0	56.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: Totals rounded to 100.

Chart 3.4.1

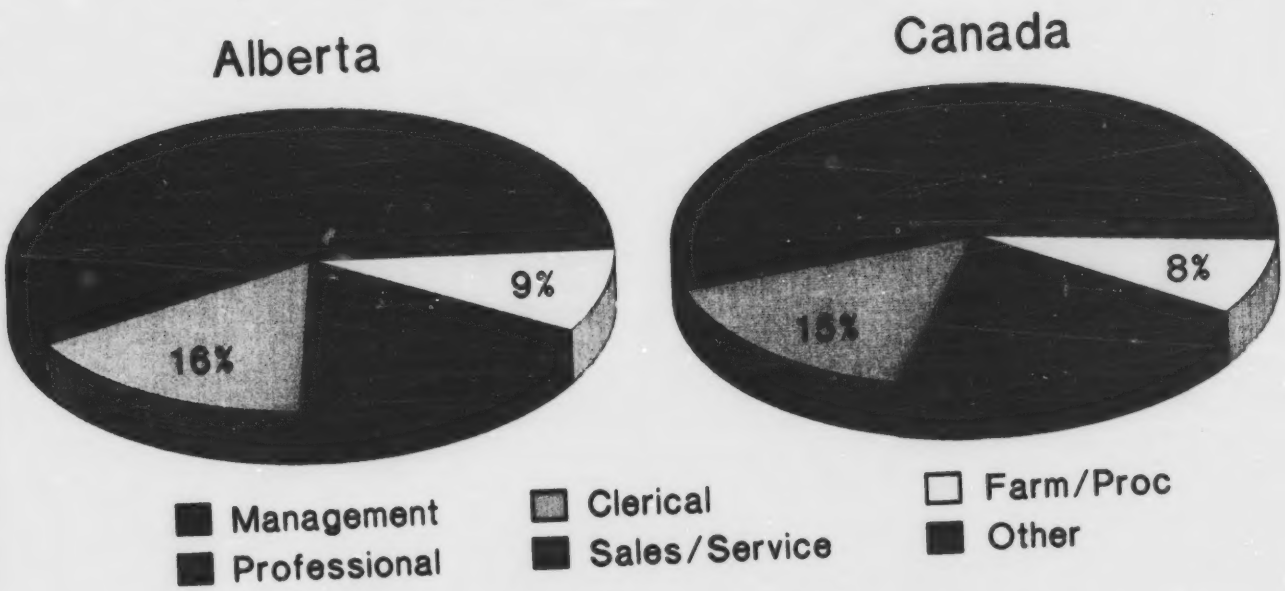
Work Status of Respondents



Health Promotion Survey, 1985

Chart 3.4.2

Occupation Group Distribution of Labour Force



Health Promotion Survey, 1986

The results show that in the population overall, the percent employed in managerial or professional occupations was higher in Alberta when compared to Canada (20.1% compared to 16.9%). Moreover, among males in Alberta 24.2% were employed in such occupations when compared to only 20.8% in the national sample. Among females the corresponding figures were 16% for Alberta and 13.2% for Canada respectively. A slightly higher proportion in the province were employed in farming and processing occupations when compared to the estimates for the country (5.5% compared to 4.2%). The proportion employed in sales and service occupations was slightly lower in Alberta than Canada.

The results presented in this section suggest that the survey population of the province was younger than that of the country. Furthermore, the overall socio-economic status of the survey population of Alberta compared favourably to that of Canada as a whole.

4. MAJOR FINDINGS

There is extensive evidence that common diseases and disabilities found in adult populations of high technology societies are affected by socially learned behaviours as well as culturally determined environmental factors. Life style - the set of habitual behaviours adopted by personal choice - accounts for more than half the annual deaths in North America[9,10]. Previous research[9,10,11] has identified several choices of life style as risk factors for serious illness and mortality.

Determining the prevalence of such behaviours may assist in allocating resources for primary disease prevention. Moreover, to develop successful preventive strategies, a basic understanding of the attitudes, beliefs, perceptions and values linked to health promotion issues which are observed in the community is necessary.

The distribution of preventive health practices and attitudes in a population is not uniform but varies with sex, age and social characteristics. Effective application of preventive health programs in Alberta benefits from information regarding the distribution of health associated lifestyles, behaviours and attitudes. This requires an estimation of the patterns of preventive health behaviour occurrence in the province in relation to major socio-demographic variables.

This section examines the health related habits and attitudes of Albertans, as recorded by the Health Promotion survey. The results are organized under the following areas:

- Smoking
- Alcohol Use
- Seatbelt Use
- Drug Use
- Exercise
- High Blood Pressure
- Cancer Screening Among Women

- General Health Perception
- Stress
- Nutrition and Dieting
- First Aid and Safety in the Home
- Health and The Workplace

4.1 SMOKING

An estimated 33 percent of Albertans smoked cigarettes in 1985, this was equivalent to 592,000 individuals. Among the smokers 88 percent smoked regularly or everyday. Overall, this proportion of smokers in the province was not significantly different from the national estimate of 34%.

4.1.1 Demographic Factors in Smoking

Among males 35% were smokers compared to 31% of females. As table 4.1.1 and Chart 4.1.1. show, men aged 30 - 39 and women aged 20 - 24 are the groups with the highest proportion of smokers: 46% and 43% respectively.

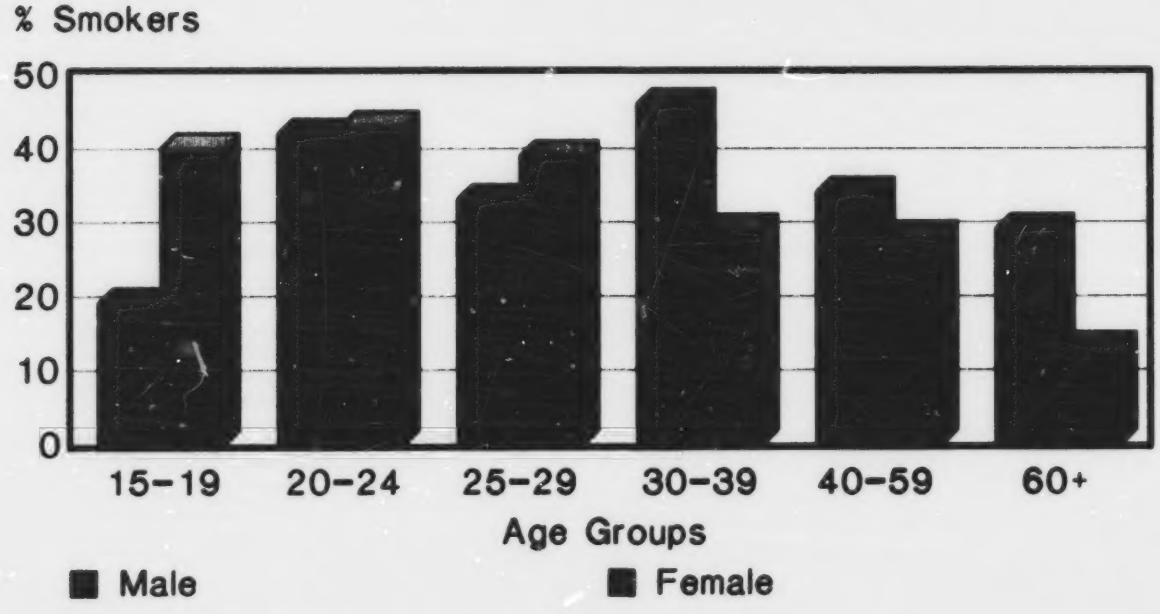
Table 4.1.1

DISTRIBUTION OF SMOKERS BY SEX AND AGE GROUP
ALBERTA AND CANADA
(Estimated %)

AGE GROUP	ALBERTA (%)			CANADA (%)		
	Male	Female	Both Sexes	Male	Female	Both Sexes
15 - 19	19*	40	30	28	29	29
20 - 24	42	43	42	40	42	41
25 - 29	33	39	35	41	42	42
30 - 39	46	29	38	41	35	38
40 - 59	34	28	31	37	33	35
60+	29	13*	20	23	20	21
ALL AGES :	35	31	33	36	32	34

Chart 4.1.1

Cigarette Smokers in Alberta, 1985
Sex and Age Distribution



Health Promotion Survey, 1985

It is noteworthy that the Edmonton Study[12] found that among men aged 25-29 almost one in two smoked (the group with the highest percentage of smokers in the city) while in the province as a whole only one in three males in this age group were smokers, as table 4.1.1 shows. The present analysis also shows that the proportion of smokers in this group was well below the national level estimate of 41 percent.

On the other hand Alberta's proportion of smokers was higher than the national estimates among the following groups:

Males 30 - 39, (Canadian estimate was 41%),
Males 60 and above, (Canadian estimate was 23%),
and
Females 15 - 19, where only 29% of Canadians smoked.

The results also indicate that married people were less likely to smoke than unmarried people. This pattern was found among both males and females.

4.1.2 Socio Economic Factors in Smoking

The distribution of smokers by sex and level of education is shown in Chart 4.1.2. A curvilinear association between the level of education and smoking was found among the sample. People of middle level education smoked more than people with little education or a high level of education. More specifically, it is noteworthy that only about one in four people who have completed university smoked cigarettes, as table 4.1.2 shows. Though the pattern of association holds for both sexes (see chart 4.1.2(a)) it was more pronounced among men. The survey results also indicate that less than one in five women who have completed university smoked cigarettes.

It is also evident from table 4.1.2 and chart 4.1.2(b) that a similar curvilinear association exists between household income level and smoking among men in Alberta. Among women, however, smoking tends to decrease as household income increases (see Chart 4.1.2(b)).

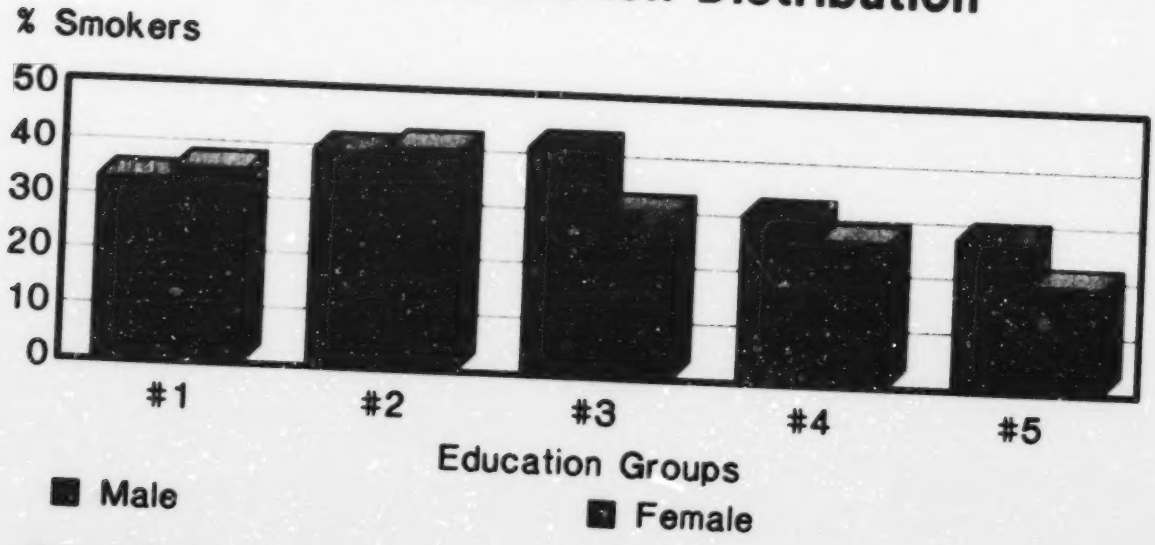
Table 4.1.2

PERCENT OF SMOKERS BY SEX AND
EDUCATION, HOUSEHOLD INCOME, WORKING STATUS AND OCCUPATION
(Estimated %)

Socio-Economic Characteristics	Smokers		
	Male (%)	Female (%)	Total (%)
Education			
Elementary/No School	33	35*	34
Some Secondary/Other Education	39	40	40
Completed Secondary	41	30	35
Any Community College/Some University	30	26	27
Completed University	27	19*	24
Household Income			
Less than $20,000/year	33	35	34
$20,000 - $40,000/year	44	28	36
$40,000 - $60,000/year	36	27*	32
$60,000/year and over	29	22*	26
Working Status			
Housekeeper	***	27	27
Looking For Work	60	82*	66
Student/Retired	18	21	20
Working	38	34	36
Occupation			
Management	32	34*	33
Professional	31	22*	27
Clerical	***	35	36
Sales/Service	54	54	54
Farming/Processing	31*	***	32
Other (Not in labour force)	46	36	45

Chart 4.1.2 (a)

Cigarette Smokers in Alberta, 1985
Sex and Education Distribution



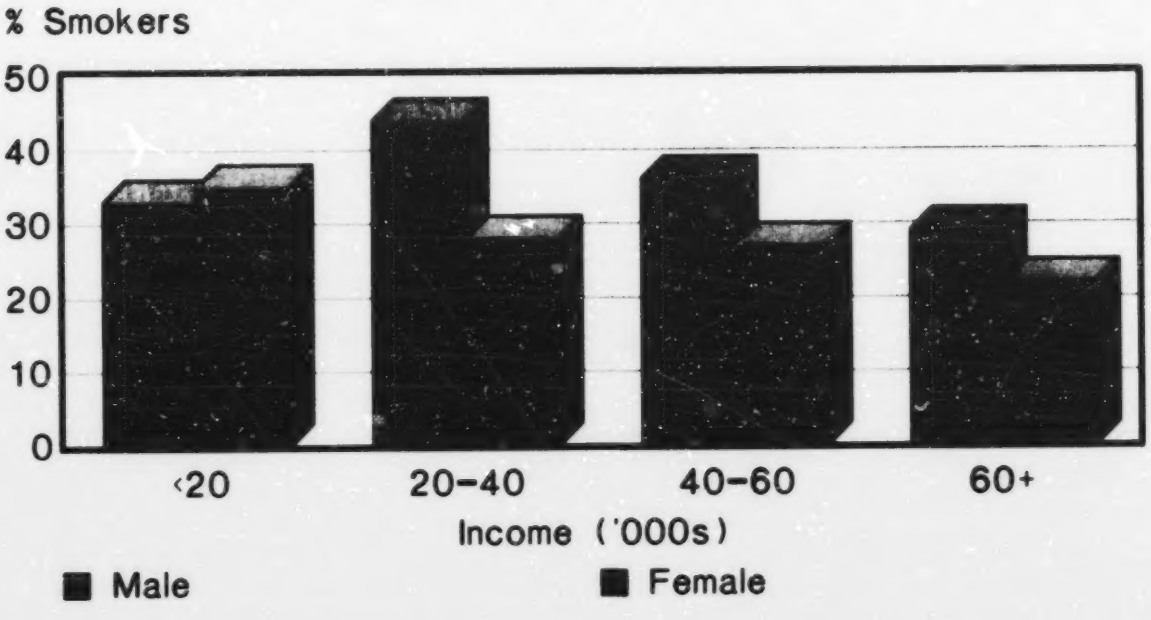
Education Groups

#1-Elementary/No School
#2-Some Sec/Other Education
#3-Complete Secondary
#4-Any Comm Coll/Some Univ
#5-Complete University

Health Promotion Survey, 1985

Chart 4.1.2 (b)

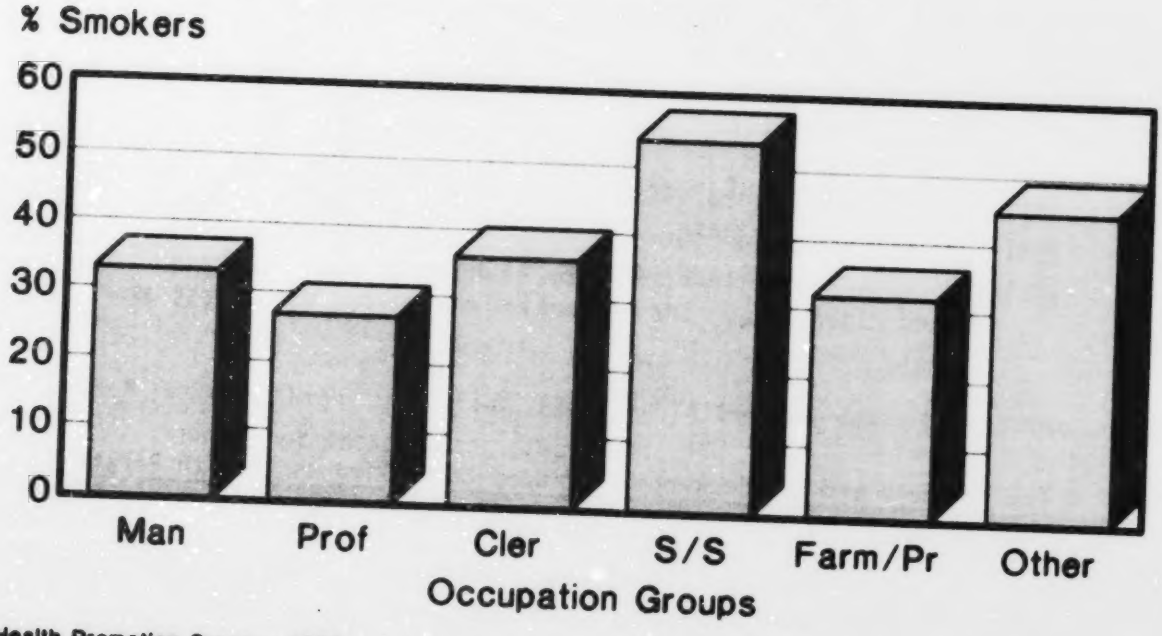
Cigarette Smokers in Alberta, 1985
Sex and Income Distribution



Health Promotion Survey, 1985

Chart 4.1.2 (c)

Cigarette Smokers in Alberta, 1985
By Occupation Groups



Health Promotion Survey, 1985

Another important finding is that almost two out of every three Albertans who were looking for work smoked. This rate is well above that observed among the total Canadian sample, where only one out of two such Canadians smoked cigarettes.

Table 4.1.2 also shows that almost four out of five women in Alberta who are looking for work smoke, whereas only three out of five men with a similar status do so. These findings suggest that unemployment status may be more stressful in Alberta when compared to Canada as a whole. Similarly unemployed women may be, in general, finding the experience more stressful than similarly situated males. The results also indicate that retired people and students tend to smoke less than other groups.

The prevalence of smoking also varied by occupation of Albertans. The findings suggest that smoking was most prevalent among those employed in Sales and Service Occupations, where more than one in two smoked cigarettes. The proportion of smokers was lowest among professionals.

4.1.3 Smokers and Non-Smokers: Attitudes to Smoking and Health Related Behaviour

Some important differences existed between smokers and non-smokers in their attitude towards some of the health related issues.

Thus survey results indicate the following patterns in the province:

- 63% felt unpleasant effects from the smoke of others; 75% of non-smokers and only 38% of smokers felt this way.

- 66% of non-smokers felt that their health was excellent or very good, whereas only 50% of smokers felt the same way.

- Smokers were more likely to have had a drink in the past year (91%) than non-smokers (80%).

- Almost half (47%) of smokers reported that they have been asked by others not to smoke.

- Even though 69% agree that if a child's parents smoke, he/she would be more likely to smoke, significantly more non-smokers agree to this issue (73%) than smokers (61%).

- Only 42% of Albertans felt that people are <u>too</u> concerned about the effect of second hand smoke on health. More smokers (59%) felt this way than non-smokers (33%).

- While less than one in three (29%) agree with the statement, "most non-smokers don't mind when people smoke in their presence", twice as many smokers (44%) than non-smokers (22%) felt this way.

- A very high proportion (91%) of Albertans felt that women should not smoke during pregnancy.

- 84% of Albertans felt that non-smokers should be provided with a smoke free work place and almost the same proportion (86%) agreed that smokers should ask permission before smoking in the presence of others.

- Only a minority of Albertans - 34% of non-smokers and 28% of smokers - believed that if a person quit smoking after ten years of heavy smoking, he or she would reduce the risk of disease significantly.

- The results also show that less than half (41%) of those surveyed have ever asked someone not to smoke. One's own home and a car are the two most common places where such proscriptions take place.

° Smokers exhibited a slightly more sedentary life style than non-smokers, with 22% of the former never exercising compared to 17% of the latter.

4.1.4 General Observations on Smoking Prevalence in Alberta

Although two-thirds of Albertans do not smoke, there is still a significant problem among younger women. More importantly, among younger age groups more women than men smoke. There have been recent studies suggesting that differences in male-female smoking habits might contribute to male-female life expectancy differences[13]. Such studies indicate that with more women starting to smoke than men, the current gender gap in longevity will begin to close.

It has recently been argued that the advertising campaign of the tobacco industry is partly responsible for this trend and such a campaign "sells women on the idea that smoking is emancipating, slimming and somehow even linked to fitness"[14].

There is clear evidence to suggest that a good majority of Albertans would like smoke-free areas to be provided at work. In the general population there is substantial support for the provision of smoke-free areas.

Previous studies[15] have emphasized and the results of this analysis all indicate that researchers, governments and health professionals should direct considerable attention to the potentially serious health consequences of interacting multiple risk factors, particularly smoking and drinking.

4.2 ALCOHOL USE

A good majority of Albertans reported that they had consumed alcohol during the year preceding the survey. Thus, the results show that 83% of Albertans have had a drink during that period. An estimated 10% of the people in the province did not consume any alcoholic beverages during that period and the remaining seven percent had never had an alcoholic drink. The corresponding estimates for Canada were similar.

4.2.1 Demographic Factors in Alcohol Use

Sex and age distribution of current drinkers - those reporting that they have consumed alcoholic beverages in the previous year - is shown in table 4.2.1(a). In general males in Alberta were more likely than females to be current drinkers. However, the same pattern was not observed in all age groups. Among the 15-19 year old Albertans, a higher proportion of females (89%) than males (70%) were current drinkers. The opposite pattern was observed for Albertans aged 60 years and over (79% males and 59% females).

Table 4.2.1 (a)

CURRENT DRINKERS IN ALBERTA
BY SEX AND AGE GROUPS
(ESTIMATED %)

Age Groups	Male (%)	Female (%)	Total (%)
15 - 19	70	89	79
20 - 24	93	88	90
25 - 29	93	85	90
30 - 39	91	86	88
40 - 59	81	83	82
60 and over	79	59	68
All Ages	85	82	83

The frequency of drinking patterns was significantly higher among males than females in Alberta. Almost one in ten males (11%) in the province stated that on the average they drank four or more days a week. Only one in twenty females in Alberta drank that often. Table 4.2.1(b) shows the distribution of drinking frequency in Alberta and Canada.

Table 4.2.1 (b)

FREQUENCY OF DRINKING BY SEX, ALBERTA AND CANADA (Estimated %)

Drinking Frequency	ALBERTA (%)			CANADA (%)		
	Male	Female	Total	Male	Female	Total
4-7 times/week	11	5	8	14	7	10
1-3 times/week	44	26	35	42	24	33
Less than once a week	30	50	40	30	47	38
None	15	18	17	14	22	18
TOTAL	100	100	100	100	100	100

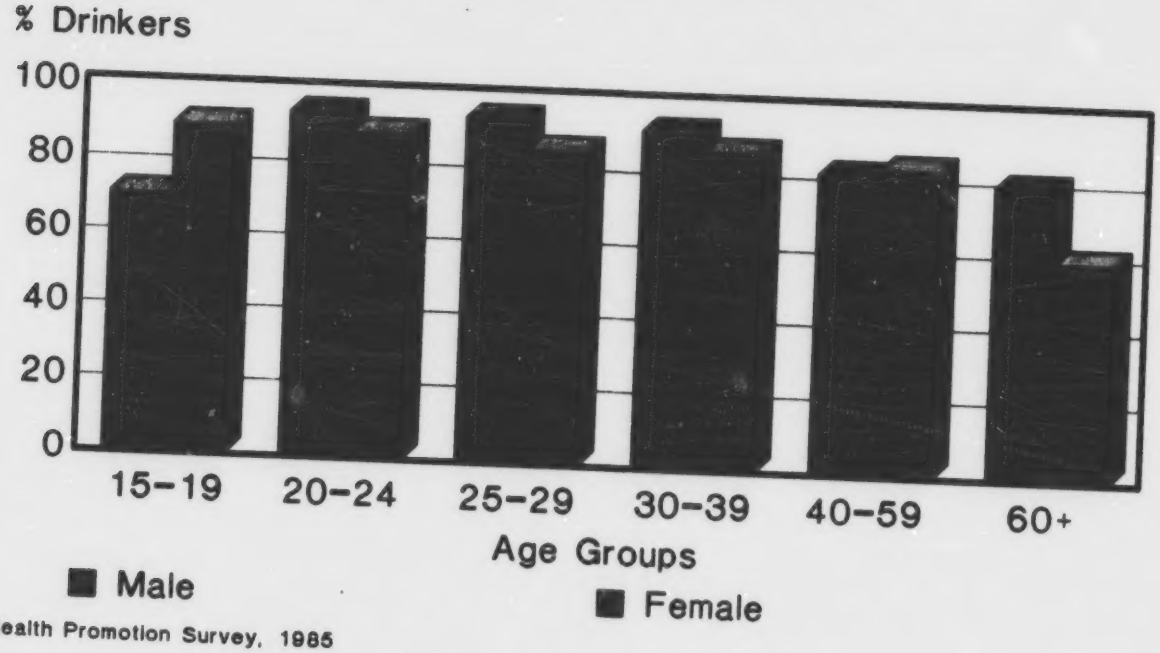
Note: Totals rounded to 100.

The results indicate that the pattern of drinking in Alberta is somewhat similar to that observed nationwide. However, the proportion of regular drinkers (those who drank 4 or more times every week) is slightly lower in the province than in Canada. Thus while 14 percent of males in the national sample reported drinking regularly only 11 percent of Alberta males drank that frequently. The corresponding figures for females were 7% and 5% respectively. The results also show that while 55% of Alberta males drank alcohol at least once a week, 31% of females drank that often.

Regular drinking in Alberta was highest among males aged 20 to 24 years with an estimated 16%. Moreover, almost half (46%) the survey respondents in this age group drank alcohol 2 or more times a week.

Chart 4.2.1 (a)

Current Drinkers in Alberta, 1985
Sex and Age Distribution



Health Promotion Survey, 1985

In general alcohol consumption was lowest among older Albertans with only 68% aged 60 years or over reporting that they have consumed an alcoholic beverage in the previous year. Moreover, only 14 percent (*) of the seniors surveyed drank more than once a week.

4.2.2 Socio-Economic Factors in Alcohol Use

The proportion of current drinkers in Alberta varied somewhat by the level of education, household income and working status. Table 4.2.2 shows the proportion of current drinkers by selected socio-economic categories and sex.

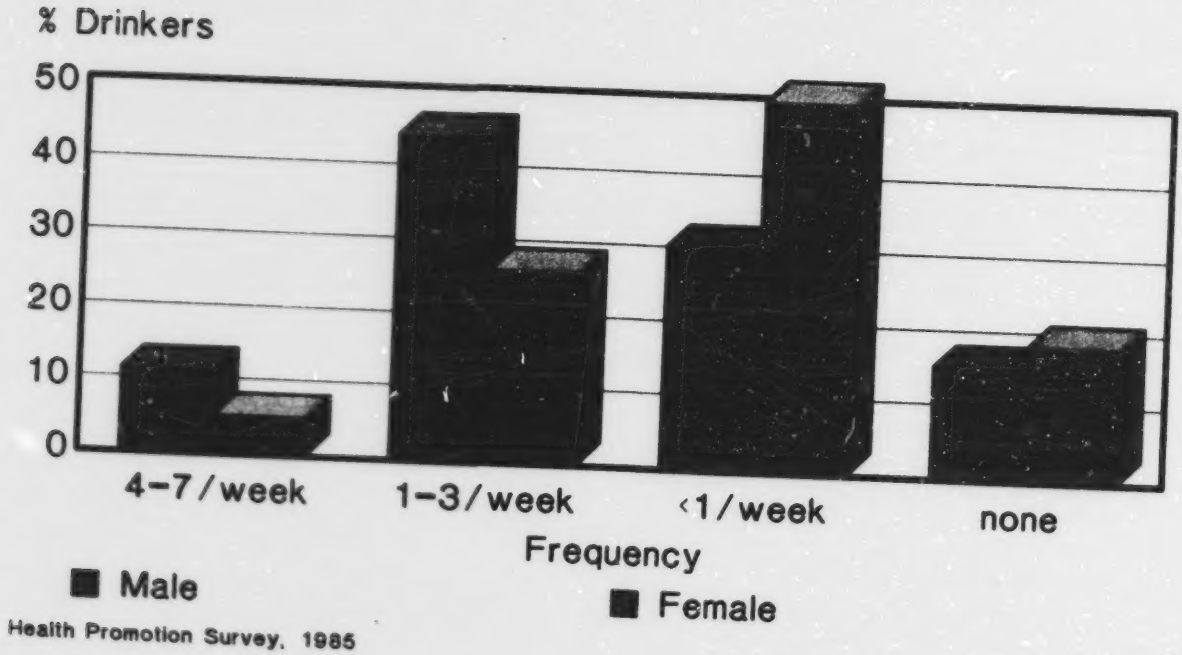
Table 4.2.2

CURRENT DRINKERS BY SEX AND EDUCATION, INCOME AND WORKING STATUS AND OCCUPATION
(Estimated %)

Socio-Economic Characteristic	Male (%)	Female (%)	Total (%)
Level of Education			
Elementary/No Schooling	77	63	71
Some Secondary/Other Education	74	79	76
Completed Secondary	92	88	90
Any Comm. College/Some Universities	92	82	87
Completed Universities	92	84	83
Household Income			
Less than $20,000	87	72	79
$20,000 - 40,000	86	83	85
$40,001 - 60,000	96	91	94
More than $60,000	92	99	95
Working Status			
Housekeeper	***	81	81
Looking for Work	79	91*	83
Student/Retired	73	75	74
Working	90	84	88
Occupation			
Management	87	86	93
Professional	89	84	87
Clerical	95	86	87
Sales/Services	92	85	88
Farming/Processing	72	***	78
Other	91	77	90

Chart 4.2.1 (b)

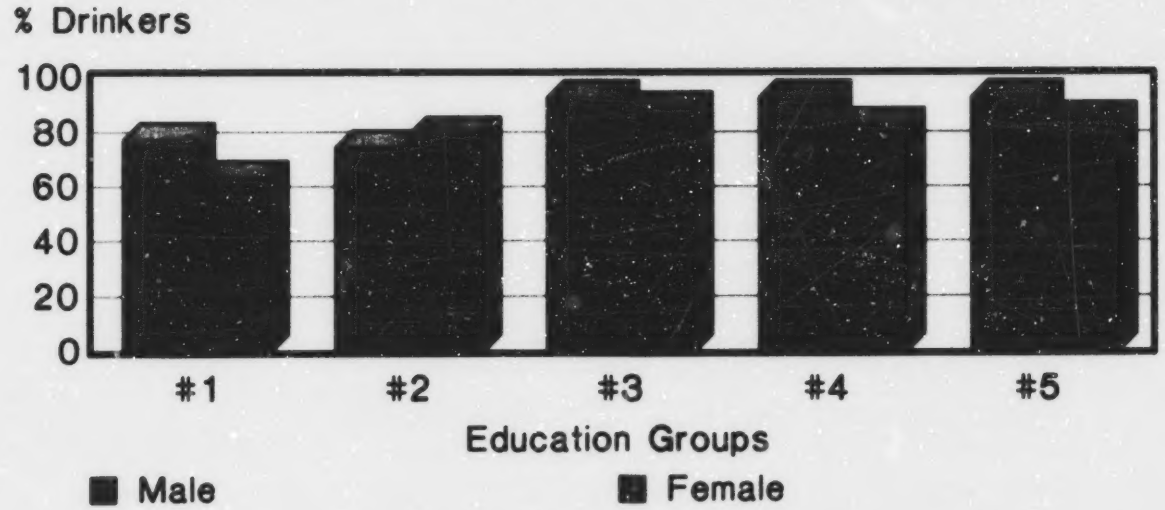
Current Drinkers in Alberta, 1985
By Sex and Frequency of Drinking



Health Promotion Survey, 1985

Chart 4.2.2 (a)

Current Drinkers in Alberta, 1985
Sex and Education Distribution



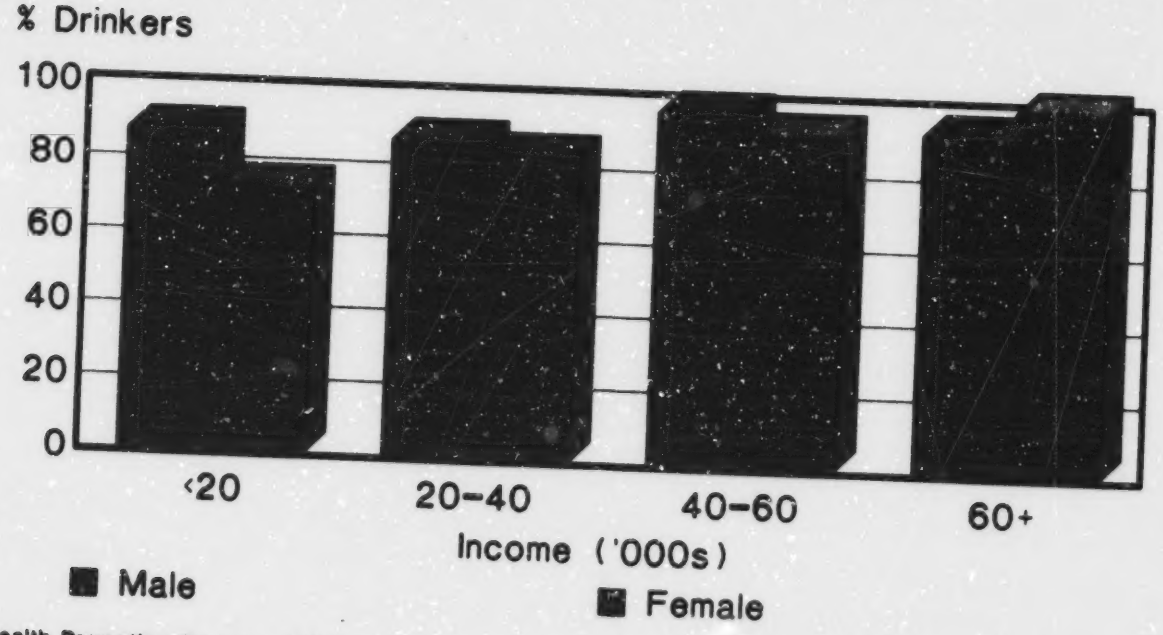
Education Groups

#1-Elementary/No School
#2-Some Sec/Other Education
#3-Complete Secondary
#4-Any Comm Coll/Some Univ
#5-Complete University

Health Promotion Survey, 1985

Chart 4.2.2 (b)

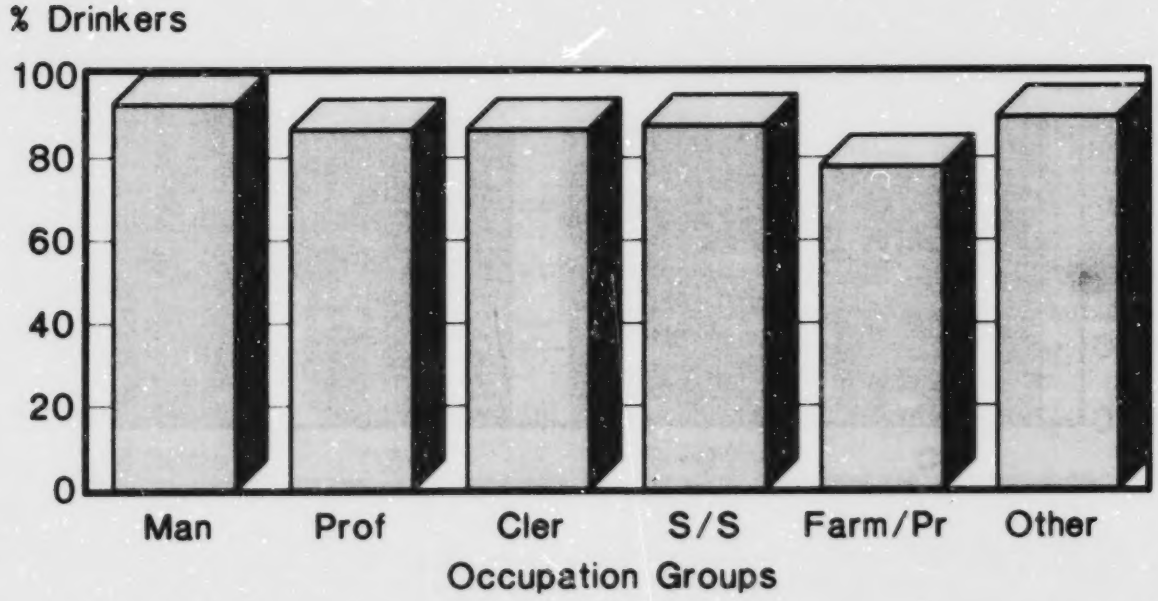
Current Drinkers in Alberta, 1985
Sex and Income Distribution



Health Promotion Survey, 1985

Chart 4.2.2 (c)

Current Drinkers in Alberta, 1985
By Occupation Groups



Health Promotion Survey, 1985

Among the total population of Alberta, a greater prevalence of current drinkers was observed among those with higher levels of education. The same pattern was also clear cut among males in Alberta. However, among females in Alberta, those with completed secondary education had the highest proportion of current drinkers (88%). Moreover, the proportion of current drinkers was slightly higher among males than females in all levels except this category.

Table 4.2.2 also shows that in the total population, the proportion of current drinkers increased with household income. The results also indicate that this pattern of relationship is more pronounced and direct among females than males. More importantly, among Albertans with a reported household income of $60,000 or more, a higher proportion of females than males were current drinkers (99% and 92% respectively). In all the lower income groups the opposite pattern was observed.

It is also important to note that among males, those who were working were more likely to be current drinkers than those who were looking for work. This pattern was reversed among females. Thus, a greater proportion of females who were looking for work, when compared to working females, were current drinkers (91% and 84% respectively). The results also indicate that among those who were looking for work in Alberta, females were more likely to be current drinkers than males. It should be noted here that given the high sampling variability these findings should be interpreted with caution.

4.2.3 Additional Findings on Alcohol Use

Some of the other findings related to alcohol use in Alberta are noteworthy:

- 27% of Albertans reported that they did not worry about their ability to drive until they have consumed more than three drinks (over the legal limit) in one hour. Another 13% did not know the number they could consume before worrying about impaired driving.

- Almost one in five Albertans (21%) reported that they have driven at least once during the previous month after drinking alcohol.
- 36% felt that moderate drinking can be good for their health.
- One in five (21%) stated that they felt an obligation to drink on social occasions when they would rather not drink.
- Almost one in four Albertans (23%) felt that most drinkers did not suffer health problems as a result of their drinking habits.
- A good majority of Albertans (66%) took steps to prevent their friends from driving after consuming too much alcohol.
- Almost all (96%) Albertans would rather pay for a taxi than let a friend drive after drinking.
- The level of stress appeared to be higher for those who reported drinking two or more times per week compared to abstainers. Thus, 54% of the former group reported leading very or fairly stressful lives when compared to 45% among the latter group.

4.2.4 General Observations on Alcohol Use

The results indicate that alcohol use is common among Albertans. Overall, the pattern of drinking in the province is similar to that observed in the county as a whole. One area of concern is the higher proportion of current drinkers among teenage females in the province when compared to males. Regular drinking among young males (20-24) in the province also appears to be high.

Much of the discussion concerning alcohol use often focuses on alcoholism. However past studies have indicated that only about 5% of drinkers could be considered alcohol dependant, and up to 10% experienced major alcohol related problems[16]. Furthermore, interpretations concerning frequency of drinking are difficult to make. This is because estimates on safe levels of consumption are inconsistent and do not take into account individual differences[17].

Many studies have identified a "correlation" with respect to drinking and heart attacks. Even though alcohol use is not generally considered

for its positive impact on health some studies have also shown that moderate drinkers have slightly lower rates of heart attacks than abstainers[18,19]. It should, however, be emphasized that low levels of alcohol consumption have been attributed in many motor vehicle accidents, suicides, family violence and problems associated with work and productivity[17].

The results presented here also suggest that there appears to be a significant proportion of Albertans who are not concerned about the legal limit of drinking before driving. It must be recognized however that it is very difficult to evaluate whether an individual's assessment concerning the number of drinks he/she could consume, within a three hour period, before worrying about driving ability, is accurate. Ability to drive after drinking depends on a large number of interdependent factors.

Overall it appears that Albertans exhibit responsible attitudes toward alcohol consumption. However, younger Albertans should be made more aware of the fact that heavy drinking can lead to serious physical effects such as liver disease or cancer as well as problems at home and work[17].

4.3 SEATBELT USE

The survey respondents were asked, "how often do you use seatbelts when you ride in a car?". Only one in four Albertans surveyed wore seatbelts all the time. An estimated 11% stated that they wear seatbelts most of the time. Thus, almost two out of three Albertans (64%) failed to practice this healthy habit of wearing seatbelts regularly.

Table 4.3.1

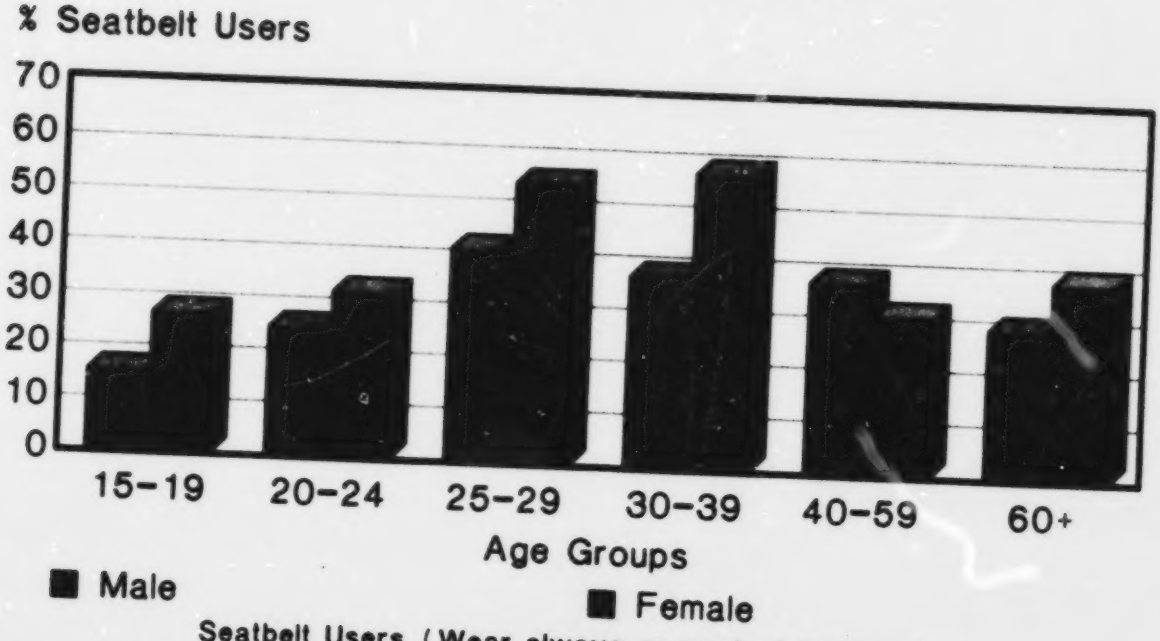
SEATBELT USERS BY SEX AND AGE GROUP
(THOSE USING SEATBELTS ALWAYS
OR MOST OF THE TIME)
ALBERTA AND CANADA

(Estimated %)

AGE GROUP	ALBERTA (%)			CANADA (%)		
	Male	Female	Total	Male	Female	Total
15 - 19	15*	26*	20	74	71	72
20 - 24	24*	31	27	64	79	71
25 - 29	40	53	46	75	83	79
30 - 39	36	56	46	75	84	79
40 - 59	36	30	33	75	83	79
60+	28*	37	33	80	85	83
ALL AGES	32	40	36	74	82	78

Chart 4.3.1

Seatbelt Use in Alberta, 1985
Sex and Age Distribution



Seatbelt Users (Wear always or most of the time)

Health Promotion Survey, 1985

4.3.1 Demographic Factors and Seatbelt Use

Regular use of seatbelts varied by sex and age as table 4.3.1 and chart 4.3.1 show. Females were more likely than males in Alberta to wear seatbelts all or most of the time (40% and 32% respectively). Among both males and females, seatbelt use was lowest among the younger age group. More than half the females aged 25 to 39 years old buckled up regularly - the group with the highest proportion of regular seatbelt users.

The prevalence of such regular use among elderly Albertans (those aged 60 years or over) was lower than that of the general population province wide. In the nationwide survey population, such regular use of seatbelts among the elderly was higher than the Canadian average.

The results also indicate that regular use of seatbelts was significantly higher among married when compared to unmarried people. 41% of the former wore seatbelts all or most of the time, while only 28% of the latter did so.

4.3.2 Socio-Economic Factors in Seatbelt Use

Table 4.3.2 presents estimates of regular seatbelt use by level of education, household income, working status and major occupational categories. It appears that irrespective of the gender of the respondent, regular use of seatbelts increases with the level of education. More importantly, the data show that almost two out of three Albertans with completed university education wore seatbelts always or most of the time. Among those with a secondary school or lower level of education only one in four individuals practised this habit.

The prevalence of seatbelt use also increased with household income. This pattern was observed among both males and females. The results also suggest that working people were more likely to use seatbelts regularly than those who were not working.

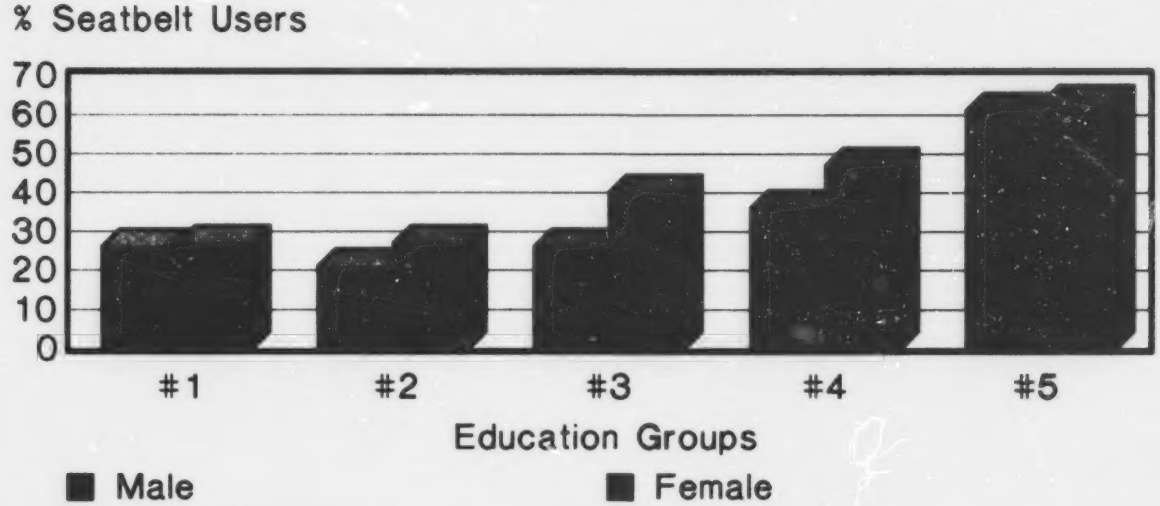
Table 4.3.2.

REGULAR SEATBELT USE
BY SEX AND EDUCATION, HOUSEHOLD INCOME,
WORK STATUS AND OCCUPATION
(Estimated %)

Socio Economic Characteristics	Male (%)	Female (%)	Total (%)
Education			
Elementary/No School	26*	27*	27
Some Secondary/Other Education	21	27	24
Completed Secondary	26	40	33
Any Community College/Some University	36	47	42
Completed University	61	63	62
Household Income			
Less than $20,000	23*	30	27
$20,000 - $40,000	33	39	36
$40,001 - $60,000	38	56	45
More than $60,000	52	60	56
Working Status			
Housekeeper	***	38	38
Looking for Work	29*	33**	30
Retired/Student	26	35	30
Working	35	44	38
Occupation			
Management	40	47*	42
Professional	67	56	62
Clerical	***	39	36
Sales/Service	26	38	31
Farming/Processing	25*	***	24*
Other	23	52*	26

Chart 4.3.2 (a)

Seatbelt Use in Alberta, 1985
Sex and Education Distribution



Education Groups

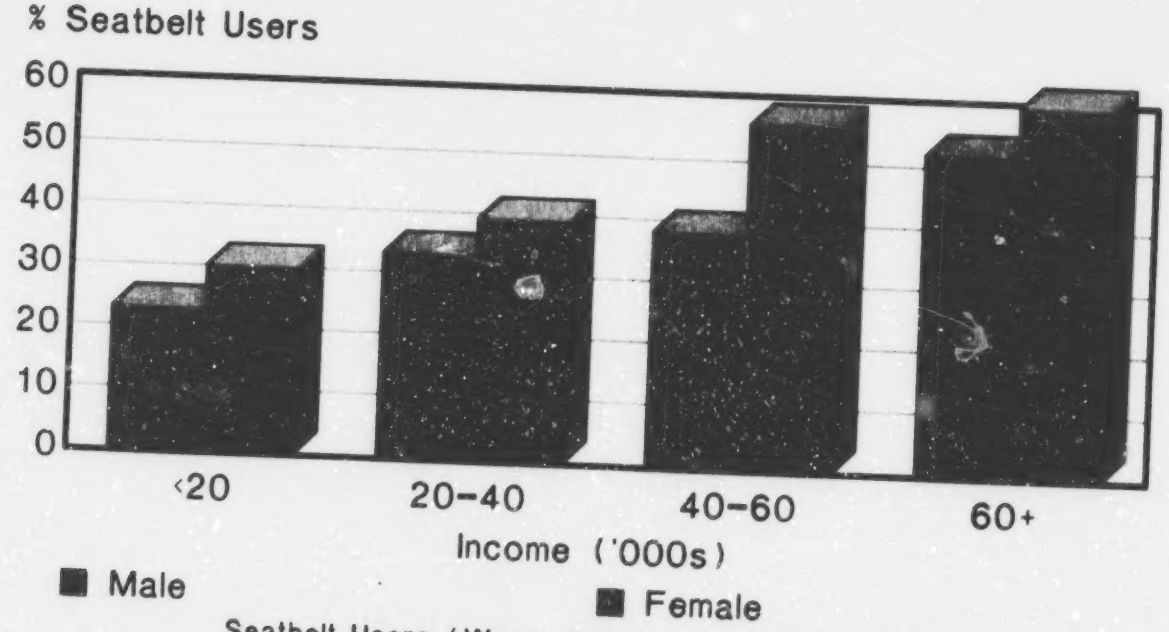
#1-Elementary/No School
#2-Some Sec/Other Education
#3-Complete Secondary
#4-Any Comm Coll/Some Univ
#5-Complete University

Seatbelt User (Wear always or most of the time)

Health Promotion Survey, 1985

Chart 4.3.2 (b)

Seatbelt Use in Alberta, 1985
Sex and Income Distribution

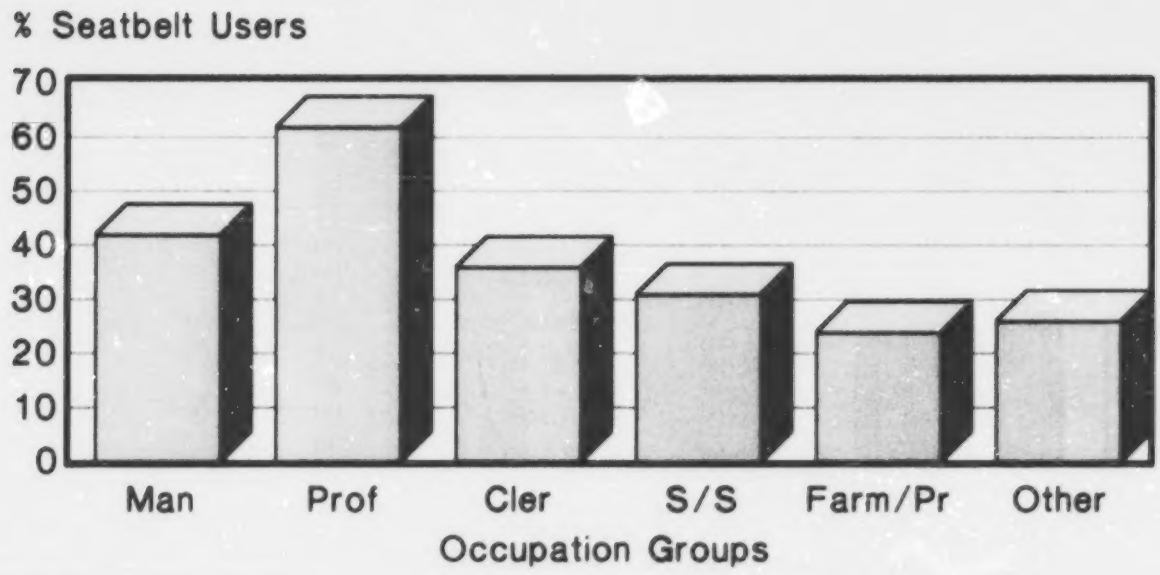


Seatbelt Users (Wear always or most of the time)

Health Promotion Survey, 1985

Chart 4.3.2 (c)

Seatbelt Use in Alberta, 1985
By Occupation Groups



Seatbelt Users (Wear always or most of the time)

Health Promotion Survey, 1985

4.3.3 Additional Factors Associated With Seatbelt Use

Some of the other important findings associated with regular seatbelt use among Albertans may be listed here:

- Non-smokers buckle up more often than smokers (40% and 27% respectively).

- Those who exercised more often were more likely to wear seatbelts than those who exercised less often.

- Three out of every four Albertans who drove with children, prompted the children to wear seatbelts all or most of the time.

- 91% of those who wore seatbelts regularly made children who rode with them use seatbelts regularly. Compared to this only 63% of adult Albertans who did not use seatbelts regularly ensured regular seatbelt use among children.

4.3.4 General Observations Regarding Seatbelt Use in Alberta

Albertans who refused to wear seatbelts on a regular basis have recently been called "last-frontier personalities" by a U.S. psychologist[20]. Over three quarters of all Canadians wear their seatbelts regularly compared to one in three Albertans. This difference could be partly due to the lack of legislation requiring mandatory use of seatbelts in the province. Studies in Canada, Britain and the United States indicate that seatbelt legislation has increased seatbelt use and reduced the number of traffic deaths and injuries[21]. In New York state, seatbelt use increased from 15% before legislation to 70% after legislation[21], and in the United Kingdom from 35% to 95%. It appears therefore that mandatory legislation may increase the prevalence of this healthy habit of regular seatbelt use.

It should also be noted here that a 1985 Transport Canada survey of vehicle seat restraint use showed that 57% of Alberta infants under one year old were observed in proper child restraint seats, compared with a national average of 43.5%[20]. However among children under age 16, Alberta has the second lowest user average at 21.9% after Quebec at 12.2%. At ages 10 to 15, only 22.1% of Alberta children used proper restraint systems, compared with 70.9% in British Columbia and 50.8% nationwide.

The results of the Health Promotion Survey presented here also indicate that the prevalence of regular seatbelt use is significantly lower at the lowest levels of socio-economic status. It appears, that those Albertans who are least able to afford this risky behavior, are the ones choosing it. Professionals in health care generally agree that increased use of this practice would lower health care costs in the province through reduction in injuries and deaths associated with motor vehicle accidents.

4.4 DRUG USE

Albertans surveyed were asked whether they have used selected drugs in the past twelve month period. Table 4.4.0 presents estimates of Albertans using such drugs based on their responses.

The results indicate that the drug most likely to be used was marijuana and hashish with an estimated 151,000 users in the province. This was followed by sleeping pills, used by 106,000 Albertans.

Table 4.4.0

ALBERTANS USING SPECIFIC DRUGS
(Estimated % and Number)

Drug Type	Estimated %	Estimated Number of Users
Marijuana or Hashish	9	151,000
Sleeping Pills	6	106,000
Tranquilizers	4	63,000
Pep Pills and Stimulants	2	26,000*
Cocaine	1	24,000*

4.4.1 Demographic Factors in Drug Use

Table 4.4.1 and Chart 4.4.1 show the estimated percent of drug users among males and females in Alberta and Canada. The results indicate that females are more likely to use sleeping pills and tranquilizers than males. The same pattern is observed in the province as well as in Canada as a whole.

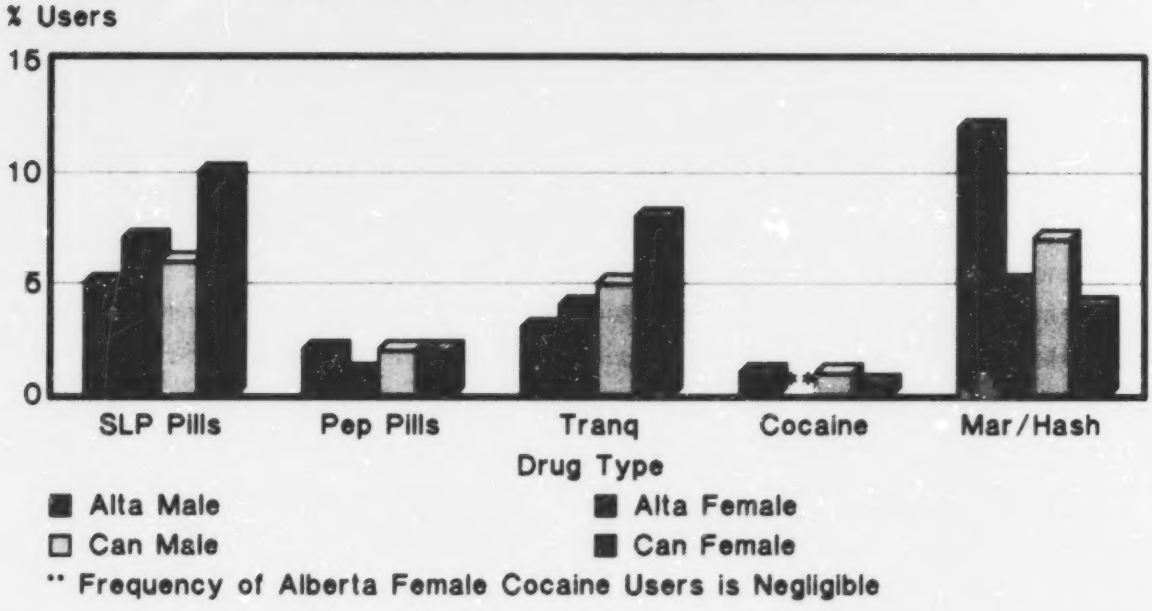
Table 4.4.1

DRUG USERS IN ALBERTA AND CANADA
BY SEX AND DRUG TYPE
(Estimated %)

Drug Type	ALBERTA (%)			CANADA (%)		
	Male	Female	Total	Male	Female	Total
Marijuana or Hashish	12	5	9	7	4	6
Sleeping Pills	5	7	6	6	10	8
Tranquilizers	3	4	4	5	8	6
Pep Pills and Stimulants	2*	1**	2	2	2	2
Cocaine	1*	***	1	1	0.5*	1

Chart 4.4.1

Drug Users in Alberta and Canada (1985 Estimates) By Sex and Drug Type



** Frequency of Alberta Female Cocaine Users is Negligible

Health Promotion Survey, 1985

The results suggest that irrespective of gender, the use of sleeping pills and tranquilizers was less prevalent in Alberta when compared to estimates for the country.

Males were more likely to have used marijuana or hashish than females. This pattern of association was similar in Alberta and Canada. Compared to Canada the reported use of marijuana or hashish was higher in the province. Moreover, when compared to the national estimates, a higher percentage of both males and females in Alberta reported using this drug.

The proportion of people using marijuana or hashish decreased with age and almost all the users of this drug in Alberta were under 40 years of age. Among this younger age group roughly one out of eight (13%) Albertans reported they have used marijuana or hashish in the previous year.

The use of tranquilizers and sleeping pills appears to increase with age. Thus 9% of Albertans over the age of 40 reported using sleeping pills compared to 4% among the 15-39 age group. While 6% of those over 40 used tranquilizers only 2% (**) of the younger age group used this drug.

Compared to married people in the province, unmarried Albertans were more likely to have used marijuana or hashish. Thus 15% of the former group reported using the drugs, while only 5% of the latter did so.

It should be emphasized here that given the very small number of users in various categories of drugs, the coefficients of variation are quite high and as such the results presented here should be interpreted with caution. Moreover, given the data release policy discussed earlier it is not possible to provide reliable estimates of drug use according to various socio-economic characteristics.

4.4.2 Other Findings Related to Drug Use

Some of the other results related to drug use in the province should be noted here:

- No difference in levels of happiness was found between users and non-users of sleeping pills or marijuana.

- Only 17%(*) of tranquilizer users stated that they were very happy compared with 40% of non-users of this drug.

- Stress levels reported by the respondents were higher for sleeping pill users with 67% stating that they lead very or fairly stressful lives, compared to 49% of non-users.

- Only 51% of those who used sleeping pills felt their health was excellent or very good compared to 61% of those who did not use sleeping pills.

- Among those who used tranquilizers only 38%(*) felt their health was excellent or very good compared to 61% of non-users.

- 60% of Albertans who used marijuana or hashish also smoked cigarettes compared to 33% of all Albertans.

- All of the respondents who reported using marijuana or hashish also reported that they have consumed alcohol during the previous year. The corresponding proportion for all Albertans was 83%.

- 51% of survey respondents felt that marijuana use had a negative impact on an individual's physical and mental health.

- Females in the province were more likely to hold this opinion than males (65% and 52% respectively).

- Almost three quarters (71%) of marijuana users did not think that the use of the drug had any negative effect on their physical or mental health.

4.4.2 General Observation on Drug Use in Alberta

Demographic patterns of drug use in Alberta are similar to that observed in the Country as a whole. Moreover, similar patterns were also reported in other studies carried out in Ontario[22] and the United States[23].

The reasons for greater prevalence of the use of sleeping pills and tranquilizers among women and the elderly in the province are not clear. Some researchers believe that those drugs provide a means to cope with stress and both institutionalized norms and availability dictate the choice of the drug used[23,24]. Other research studies have, however, indicated that prescribed drugs were often used appropriately to deal with physical and mental health problems[25].

The results of this survey also indicate that reported levels of health of the users of sleeping pills and tranquilizers are not as good as that of non-users of these drugs. However, there are a number of instances where the drug may cause the poor health rather than health problems leading to the use of drugs.

Marijuana and Hashish use appear to be higher in Alberta than in the country as a whole. Of particular concern to professionals in health promotion and education should be the use of these drugs among teenagers and young adults in the province. Furthermore, the results indicate that there is a greater prevalence of other health associated risk factors such as cigarette smoking and alcohol use among the users of marijuana or hashish. The results again clearly indicate that interacting multiple risk factors pose serious health consequences among younger Albertans and warrant increased attention.

Although a large majority of the survey population in Alberta reported not using most of the drugs considered here, the results should be interpreted with caution. This is because, given the sensitive nature of the issue of drug use, some respondents may not have admitted to the use of drugs. The actual number of users may therefore be higher than reported estimates. There is no doubt that regular use of all these drugs, both legal and illegal, is dangerous and calls for continued monitoring and further research. The government has a role to play in promoting public awareness and discussion of the dangers of drug abuse.

4.5 EXERCISE

Regular exercise plays an important role in physical fitness and thereby improves the health status of individuals. The respondents in this survey were asked whether they felt that they were getting enough exercise. Exercise referred to here included vigorous activities such as calisthenics, jogging, racquet sports, team sports, dance classes or brisk walking. While almost 2 out of 3 Albertans exercised (63%) 3 or more times a week, more than one-half (55%) of Albertans replied that they were getting less exercise than they needed.

4.5.1 Demographic Factors and Exercise

A higher proportion of females when compared to males stated that they were getting less exercise than they needed - 58% and 51% respectively. Albertans were also asked to indicate how often they exercised at least 15 minutes in an average week. The estimated percent distribution of the frequency of exercise among the survey population is shown in table 4.5.1.

Table 4.5.1

FREQUENCY OF EXERCISE
AMONG ALBERTANS BY SEX
(Estimated %)

Frequency of Exercise	Male (%)	Female (%)	Total (%)
Daily	34	29	31
5-6/week	9	9	9
3-4/week	23	24	23
1-2/week	14	12	13
Less than once a week	3	3	3
Never	16	22	19
TOTAL	100	100	100

The results indicate that almost 2 out of 3 Albertans reported that they exercised three or more times a week. A slightly higher proportion of males exercised this frequently compared to females; the corresponding figures were 66% and 61%. The data also indicate that about one in five Albertans lead a sedentary lifestyle. Moreover, a higher proportion of females compared to males reported that they never exercised; corresponding figures being 16% and 22% respectively. Table 4.5.1(b) presents the age and sex distribution of the proportion of individuals exercising three time or more per week. The results show that overall, the proportion of Albertans who exercised on a regular basis tends to decrease with age. This pattern is similar among both males and females. In all age groups, and regardless of gender, the proportion of regular exercisers in Alberta was higher than the national estimates.

Table 4.5.1(b)

THOSE WHO EXERCISED THREE OR MORE TIMES PER WEEK, BY SEX AND AGE GROUP, ALBERTA & CANADA

(Estimated %)

AGE GROUP	ALBERTA (%)			CANADA (%)		
	Male	Female	Total	Male	Female	Total
15 - 19	85	82	84	78	72	75
20 - 24	78	65	72	61	58	59
25 - 29	58	54	56	56	53	54
30 - 39	64	55	60	55	50	53
40 - 59	59	61	60	45	50	48
60+	65	57	61	55	47	51
ALL AGES	66	61	63	56	53	54

The survey results also suggest that regular exercise was more prevalent among the unmarried people than married ones in Alberta. Thus 69% of unmarried Albertans reported that they exercised three or more times every week; while only 59% of married people in the province exercised that often.

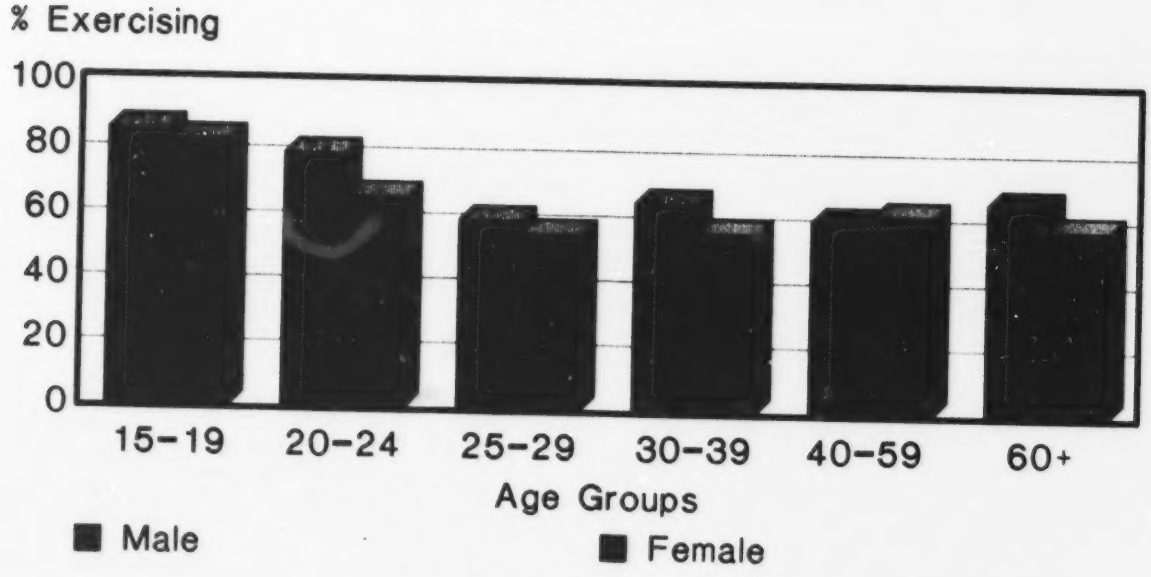
4.5.2 Socio Economic Factors in Exercise

The proportion of individuals who exercised regularly - three or more times per week - varied somewhat by socio-economic characteristics. Table 4.5.2 and accompanying charts present the estimated percentage of Albertans who exercise regularly by level of education, household income, working status and occupation.

The results indicate that individuals with higher than secondary school education are more likely to exercise regularly when compared to those at the lower levels of education. This pattern was similar among both males and females. Three out of four Albertans who have had a university degree exercised regularly.

Chart 4.5.1 (b)

Albertans Exercising at Least Three Times Per Week (1985 Estimates) Sex and Age Distribution



Health Promotion Survey, 1985

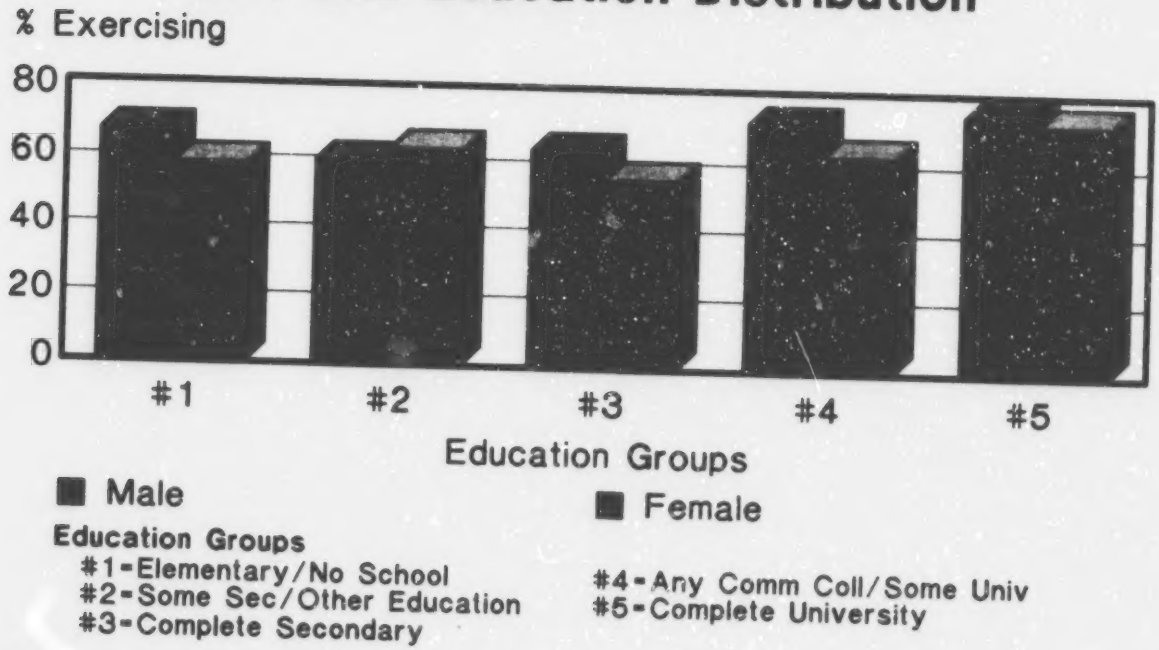
Table 4.5.2

THOSE EXERCISING THREE OR MORE TIMES/WEEK
BY SEX AND EDUCATION, HOUSEHOLD INCOME, WORK STATUS
AND OCCUPATION
(Estimated %)

Socio Economic Characteristics	Male (%)	Female (%)	Total (%)
Education			
Elementary/No School	67	58	63
Some Secondary/Other Education	59	63	61
Completed Secondary	63	55	58
Any Community College/Some University	72	63	67
Completed University	75	73	74
Household Income			
Less than $20,000/year	70	55	62
$20,000 - $40,000/year	65	57	61
$40,000 - $60,000/year	58	63	60
$60,000/year and over	68	64	66
Working Status			
Housekeeper	***	54	54
Looking For Work	58	70*	62
Student/Retired	77	70	74
Working	63	61	62
Occupation			
Management	58	63	59
Professional	65	58	62
Clerical	70**	65	65
Sales/Service	56	51	54
Farming/Processing	76	***	74
Other	60	64	61

Chart 4.5.2 (a)

Albertans Exercising at Least Three Times per Week (1985 Estimates) Sex and Education Distribution



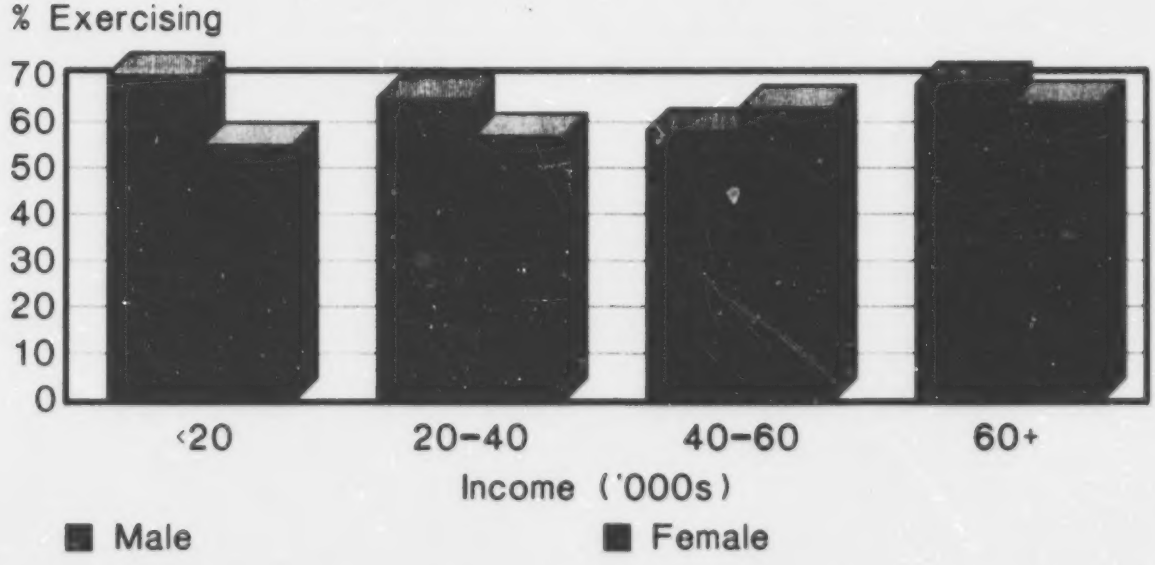
Education Groups

#1 - Elementary/No School
#2 - Some Sec/Other Education
#3 - Complete Secondary
#4 - Any Comm Coll/Some Univ
#5 - Complete University

Health Promotion Survey, 1985

Chart 4.5.2 (b)

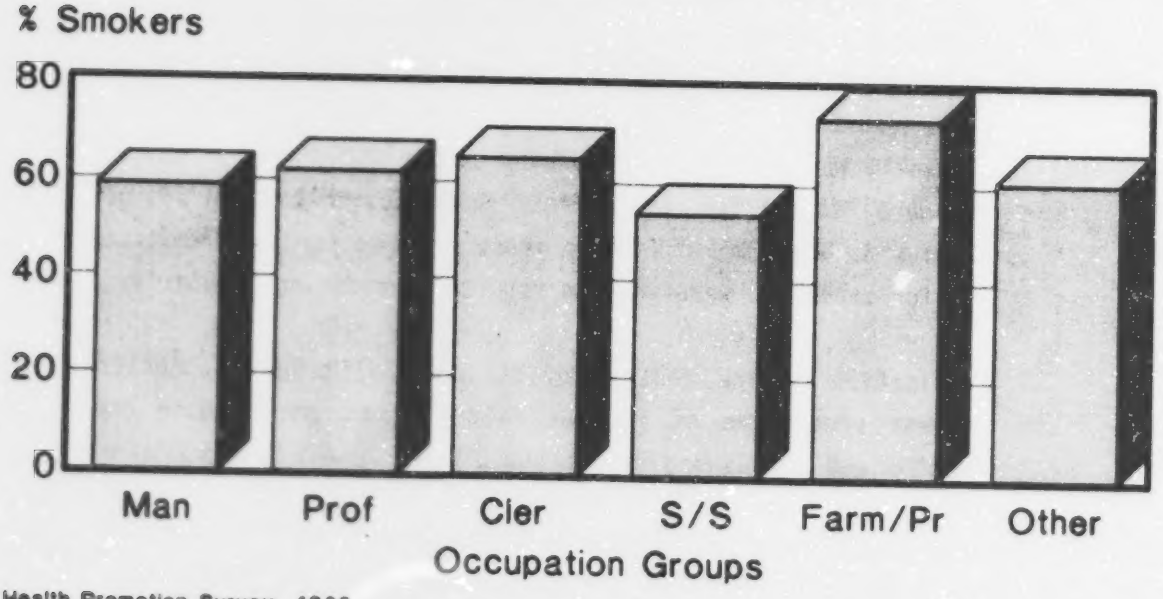
Albertans Exercising at Least Three Times Per Week (1985 Estimates) Sex and Income Distribution



Health Promotion Survey, 1985

Chart 4.5.2 (c)

Albertans Exercising at Least Three Times per Week (1985 Estimates) By Occupation Groups



Health Promotion Survey, 1985

The nature of the relationship between household income and regular exercise is not very clear. Within the total population the group with the highest level of household income (more than $60,000) recorded the highest proportion of people who exercised regularly. Among females in Alberta the proportion who exercise regularly increased with the level of income. Among males, on the other hand, there appears to be a curvilinear association between household income and regular exercise. Thus, among males in Alberta, the proportion of people who exercise regularly was lower among the middle income groups when compared to other groups. Moreover, the result indicates that among males the proportion who exercised regularly was highest in the group with the lowest level of income. This is perhaps the result of an interaction between age and income.

Table 4.5.2 also show that among males, the proportion who exercised regularly was higher among working people (63%) when compared to those who were looking for work (58%). The opposite pattern was noted among females in Alberta; 70% among those looking for work when compared to 61% for those who were working reported exercising regularly.

Examination of the results by occupational groups suggests that the highest proportion of regular exercise was among those employed in farming and processing occupations. The lowest proportion of regular exercise was recorded among people employed in sales and service occupations.

4.5.3 Additional Findings on Exercise

Some other factors associated with the practice of regular exercise among Albertans are noteworthy:

- One third of those who exercised daily reported that their health was excellent when compared to other people in their age group. Only 15% of those who never exercised felt this way.

- Only 8%(*) of elderly Albertans felt that getting more exercise would improve their health a great deal. Compared to this, among the younger generation of Albertans almost one in three believed that more exercise would considerably improve their health.

- Almost two out of every three Albertans aged 60 years and over reported that they were getting as much exercise as they needed. Among Albertans at large, only 45%, felt that they were getting enough exercise.

- Over one half (52%) of those who never exercised believed that they were as active or more active than others in their own age group. Moreover, almost one in four (28%) Albertans who never exercised felt that they were getting enough exercise.

- Only one out of four Albertans who lead a sedentary lifestyle believed that more exercise would improve their health significantly.

4.5.4 General Comments on Exercise Among Albertans

A relatively high level of exercise was reported by many Albertans. Thus, two out of every three exercised at least three times every week. Among the national sample only about one in two (54%) exercised this frequently. In this regard both males and females in the province compared favourably to Canada as a whole. Among the elderly population Albertans appear to exercise more regularly when compared to national estimates (61% and 51%). The results thus indicate that Albertans are well aware of the need to exercise regularly.

The survey findings also indicate that almost one in five Albertans did not undertake any exercise lasting 15 minutes or more. This is equivalent to about 325,000 individuals. It should be noted however that the survey did not take into account the extent of physical activity carried out during work. Similarly health problems and

physical handicap might also influence the response to questions regarding exercise. Health education programs designed to improve the degree of exercise carried out in Alberta should take into account these and other factors such as socio-economic status which inhibit or encourage this practice. Because exercise is often related to other good health behaviours as well as various dimensions of health status, it should be an important element in comprehensive primary prevention and health promotion strategies.

4.6 HIGH BLOOD PRESSURE

Hypertension, or high blood pressure is responsible for a good deal of mortality and morbidity in North American communities. Therefore periodic checking of blood pressure is indicative of good health behaviour.

The results of this survey show that an estimated 93% of Albertans have had their blood pressure checked sometime in the past. However, only 74 percent of Albertans had it checked during the year previous to the survey. Approximately 3% of Albertans reported that they have never had their blood pressure checked and an additional 2% (*) did not know when they have had it checked. This estimate translates to 86,000 Albertans who did not know whether they had high blood pressure at the time of the survey.

Among those who have had their blood pressure checked, eight percent - 151,000 Albertans - said they had high blood pressure. Among those with reported high blood pressure, only 69 percent did something specific to control it. Thus, there were roughly 47,000 Albertans with high blood pressure who did nothing to keep it under control.

4.6.1 Demographic Factors and checking of Blood Pressure

A significantly higher proportion of females, when compared to males, reported that they have had their blood pressure checked in the past year. Among females in Alberta 85% had it checked within this period

while only 65% of males did so.

Among those who have had their blood pressure checked, a slightly higher proportion of females than males reported that they had high blood pressure at the time of the survey, the corresponding figures being 9% and 8% respectively.

Table 4.6.1 shows the sex and age group breakdown of the percentage of people who have had their blood pressure checked during the previous year.

Table 4.6.1

THOSE WHO HAVE HAD THEIR BLOOD PRESSURE CHECKED DURING THE PREVIOUS YEAR, BY SEX AND AGE: ALBERTA AND CANADA

(Estimated %)

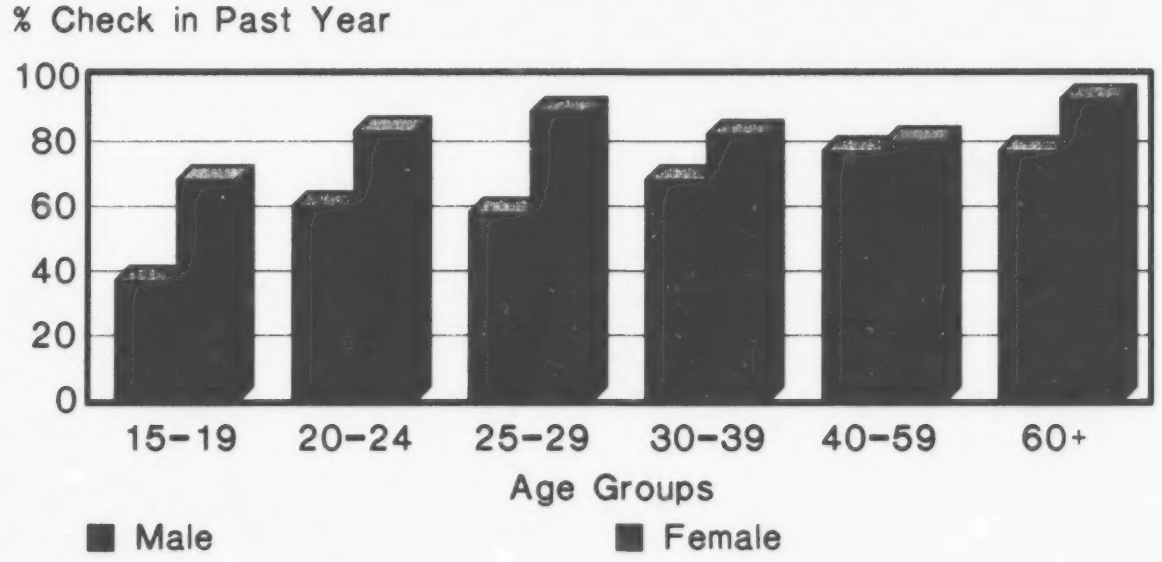
AGE GROUP	ALBERTA (%)			CANADA (%)		
	Male	Female	Total	Male	Female	Total
15 - 19	37	68	52	45	63	54
20 - 24	60	83	71	55	80	67
25 - 29	58	89	72	67	82	74
30 - 39	68	82	75	65	80	73
40 - 59	77	80	79	77	84	81
60+	77	93	86	85	89	87
All Ages	65	85	74	68	82	75

As expected, this proportion increases with age. Moreover, the results indicate that in each age group females were more likely than males to have had their blood pressure checked during the past year.

Among the youngest age group (15-19) only about one in three males (37%) in the province reported that they have had their blood pressure

Chart 4.6.1

Albertans Having Their Blood Pressure Checked in the Past Year (1985 Estimates) Sex and Age Distribution



Health Promotion Survey, 1985

checked within a year, while almost two in three females (68%) did so. Part of this difference could be attributed to the use by females of family planning and prenatal services. It is appropriate to note here that Alberta males in this youngest age group were less likely, when compared to the Canadian sample, to have had their blood pressure checked in the recent past - 37% in Alberta and 45% in Canada. The reasons for this difference are not clear.

The data also indicate that 93% of elderly females in the province have had their blood pressure checked within the previous year, while only 77% of elderly males have done so. More importantly, the findings indicate that elderly males in Alberta were less likely to have had their blood pressure checked within the past year when compared to their counterparts in Canada at large. (The corresponding figures were 77% and 85% respectively). Among elderly females the opposite pattern was indicated with 93% in Alberta and 89% in Canada as a whole reporting that they have had their blood pressure checked in previous year.

The results of the survey also suggest that among those with reported high blood pressure, females were more likely than males to have taken steps to control it. The corresponding estimates were 76% for females and 60% for males. Moreover, among this group with reported high blood pressure, 81% of females stated that their blood pressure had been checked within the past six months. In contrast only 62% of males with reported high blood pressure indicated that their blood pressure had been checked during the previous six months.

4.6.2 Socio-Economic Factors and Checking of Blood Pressure

Table 4.6.2 shows the percentage distribution of those who have had their blood pressure checked during the year preceding the survey, by selected socio-economic characteristics. Among the population overall, when these estimated percentages were compared across various levels of education, no discernible pattern of difference was observed.

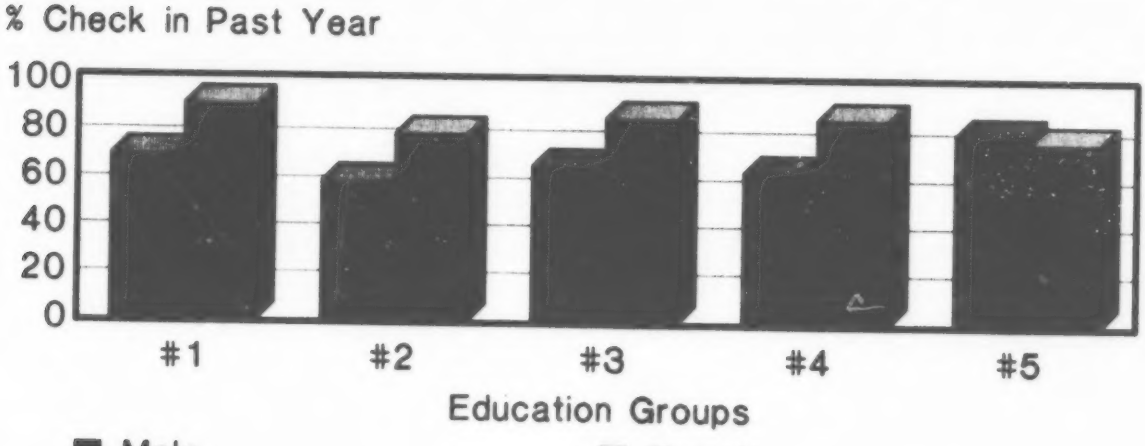
Table 4.6.2

THOSE WHO HAVE HAD THEIR BLOOD PRESSURE CHECKED DURING THE PREVIOUS YEAR, BY SEX AND LEVEL OF EDUCATION, HOUSEHOLD INCOME, WORKING STATUS AND OCCUPATION
(Estimated %)

Socio-Economic Characteristics	Male (%)	Female (%)	Total (%)
Education			
Elementary/No School	69	90	78
Some Secondary/Other Education	58	78	68
Completed Secondary	65	85	75
Any Community College/Some University	63	85	75
Completed University	79	76	78
Household Income			
Less than $20,000/year	72	91	82
$20,000 - $40,000/year	69	84	76
$40,000 - $60,000/year	67	82	73
$60,000/year and over	62	80	71
Working Status			
Housekeeper	***	83	83
Looking For Work	58	85	66
Student/Retired	64	82	72
Working	66	83	73
Occupation			
Management	64	86	71
Professional	78	86	83
Clerical	69	85	83
Sales/Service	63	72	68
Farming/Processing	69	***	70
Other	62	88	65

Chart 4.6.2 (a)

Albertans Checking Their Blood Pressure In the Past Year (1985 Estimates) Sex and Education Distribution



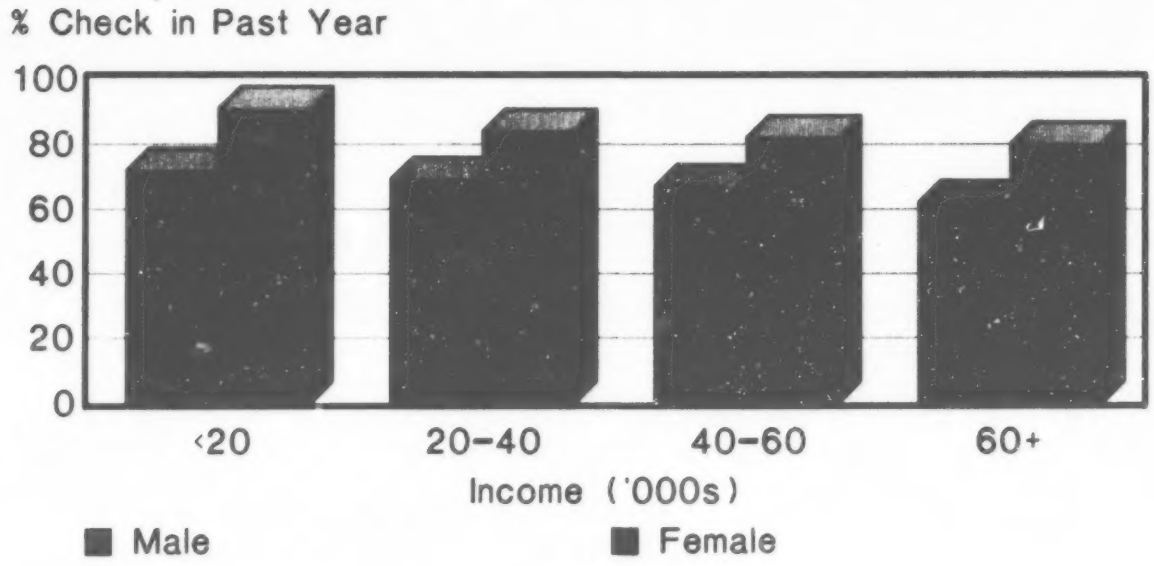
Education Groups

#1-Elementary/No School
#2-Some Sec/Other Education
#3-Complete Secondary
#4-Any Comm Coll/Some Univ
#5-Complete University

Health Promotion Survey, 1985

Chart 4.6.2 (b)

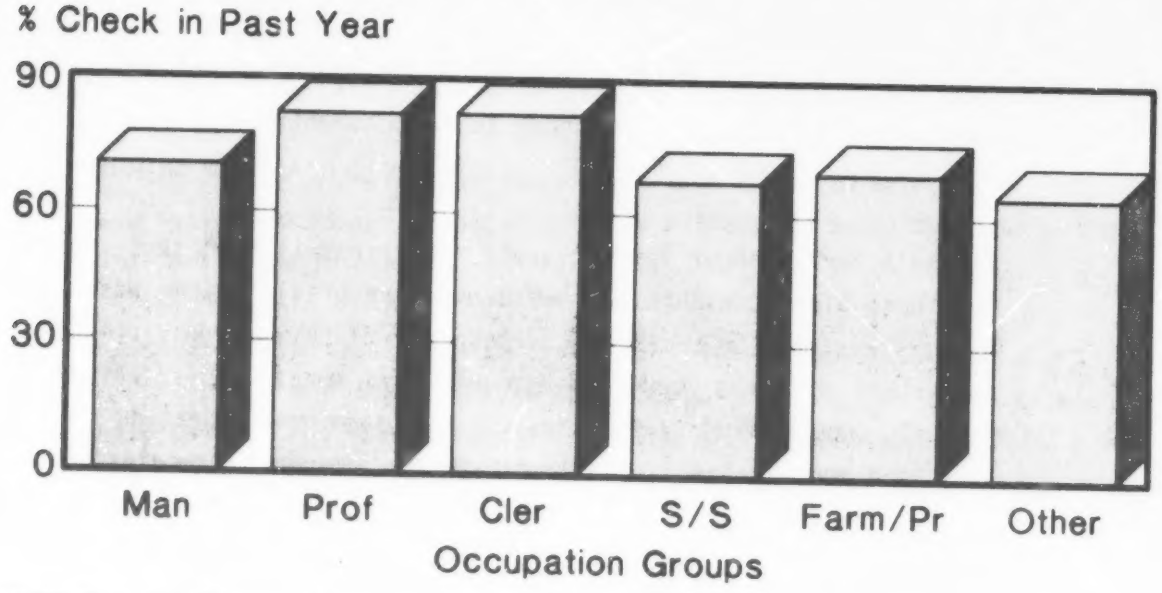
Albertans Checking Their Blood Pressure In Past Year (1985 Estimates) Sex and Income Distribution



Health Promotion Survey, 1985

Chart 4.6.2 (c)

Albertans Having Their Blood Pressure Checked in the Past Year (1985 Estimates) By Occupation Groups



Health Promotion Survey, 1985

It should be noted, however, that among females in Alberta those with the lowest education recorded the highest proportion for this measure (90%). On the other hand, in the case of males in the province, the corresponding figure was highest among those with completed university education. The reasons for such differences are again not very clear.

The likelihood of having blood pressure checked within the past year appears to decrease with household income. This pattern of association holds for both males and females in the province, as table 4.6.2 shows.

Among the population overall, those who were working were more likely to have had their blood pressure checked within the preceding year when compared to those who were looking for work. A similar pattern is also observed in the case of males in the province. In the case of females in Alberta, however, there appear to be no significant differences in this regard.

In the Alberta labour force overall, the proportion of those who have had their blood pressure checked during the previous year was highest for professional and clerical categories of occupation. The lowest proportion for this indicator was observed among 'sales/service' and 'other' occupational categories. The same configuration is also indicated among males in the labour force. Among the females who were in the labour force this proportion did not vary significantly among most of the occupational groups. The exception was the 'sales/service' category. Among females also, this group recorded the lowest proportion of those who have had their blood pressure checked within the past year.

4.6.3 Additional Findings and General Observation on High Blood Pressure

Respondents in the survey were asked if they agreed with the statement, "you only need to have your blood pressure checked if you think you have a problem". Of those who have never had their blood pressure checked or did not know when they had it checked, almost one of two

(47%) agreed with this statement. In comparison, only one in eight (16%) of those who had their blood pressure checked agreed with the statement.

Since high blood pressure is often not followed by particular symptoms, it is very important that all individuals, including apparently healthy people, have their blood pressure checked. Ideally, this should be done at least once every year. It is noteworthy that almost three quarters of Albertans have had their blood pressure checked within the year preceding the survey. Among the population overall this estimate for the province is similar to that recorded for the country as a whole. The results of this survey also suggest that females in Alberta were more likely than males to have had their blood pressure checked in the recent past; a pattern similar to the one observed nationwide. However, males in the province were less likely to have had their blood pressure checked within the previous year when compared to males in the country as a whole. This is particularly the case among the youngest and oldest males in Alberta.

The actual proportion of Albertans with high blood pressure is not easy to determine using telephone interviews. However, the estimate of 8% indicated by the results is very similar to that observed in a shopping mall study[26] carried out in Alberta a few years ago.

In most cases, serious health consequences of high blood pressure could be avoided only through continuous treatment involving drugs and special diets. That three out of ten Albertans (four out of ten in the case of males) with high blood pressure were not doing anything to control it indicates a need for improvement in this area. Whether this state of affairs exists due to lack of knowledge of the possible consequences of untreated high blood pressure, reluctance of individuals to follow prescribed procedures of treatment or inefficient management on the part of health professionals, must be ascertained. This is an appropriate area to be tackled by family physicians and health educators in the province.

4.7 CANCER SCREENING AMONG WOMEN

Among women in North America, breast cancer is the leading cause of deaths from cancer. Research studies[27] conducted in the U.S. suggest that a fourth of the total mortality from breast cancer might be prevented if regular medical screening for breast cancer is carried out among all adult women. Studies[28,29] have also shown that a majority of breast cancer is found by women themselves through self examination, and early diagnosis of such cancer increases the likelihood of survival. It is therefore generally recognized that monthly breast self examination (BSE) by adult women, along with yearly medical breast examination (MBE) may lead to early diagnosis of breast cancer and this in turn would increase the likelihood of a cure.[30]

Carcinoma of the cervix is another common lethal cancer among women. PAP smear test involves the microscopic examination of cells scraped from the surface of the cervix at the entrance of the uterus. PAP smear test came into regular use following World War II as a way of detecting the early stages in the development of cervical cancer. The HPS collected data relating to both breast and cervical cancer screening prevalence among women.

Female respondents were asked: "In the past 12 months have you had your breast examined by a doctor or nurse?". The results indicate that in Alberta, 68% of the survey population have had such a medical breast examination (MBE). In Canada as a whole only 65% indicated that they had a medical breast examination (MBE).

To determine the prevalence of breast self examination (BSE), respondents were first asked whether they have been shown how to examine their breasts. The data suggest that 77% of women in Alberta have been shown this procedure compared to 75% for the Canadian sample. The findings also indicate that 43% of women in Alberta carried out BSE every month while only 38% in Canada did so. The results also suggest that almost one in 6 women (17%) in Alberta have never practised BSE. This compares favourably to the national estimate of 24% who have never practised BSE.

To determine the proportion of women who have had cervical cancer screening, the respondents were asked: "when was the last time you had a PAP smear test for cancer?". Table 4.7.0 shows the estimate percentages for Alberta and Canada.

Table 4.7.0

WOMEN WHO HAVE HAD PAP SMEAR TEST FOR CERVICAL CANCER

(Estimated % for Alberta & Canada)

When the Women Had PAP Test	Alberta (%)	Canada (%)
Past Year	62	56
More than a year ago	22	25
Never	11	14
Don't know and not stated	6	4*
TOTAL	100	100

Note: Totals rounded to 100.

The data suggest that women in Alberta were more likely to have had a PAP test within the previous year when compared to women in Canada as a whole. Moreover, the proportion who have never had a PAP test was also lower in Alberta (11%) when compared to the national estimate (14%).

4.7.1 Demographic Factors In Cancer Screening Among Women

Table 4.7.1 and Chart 4.7.1 show the estimates for Alberta by age-group and pertaining to the following dimensions of cancer screening among women:

- Those who have had a medical breast examination in the previous year (in %),
- Those who have been shown BSE (in %),
- Those who perform BSE at least once very month (in %), and
- Those who have had a PAP smear test in the previous year (in %).

Table 4.7.1

CANCER SCREENING PATTERNS AMONG WOMEN IN ALBERTA, BY AGE-GROUP

(Estimated %)

AGE GROUP	Those Having Had a Medical Breast Exam. (MBE) in the Past Year (%)	Those Having Been Shown Breast Self Examination (BSE) (%)	Those Performing BSE At Least Once A Month (%)	Those Having Had a PAP Smear Test in the Previous Year (%)
15 - 19	46	54	28*	40
20 - 24	75	69	37	76
25 - 29	83	87	45	75
30 - 39	73	89	51	75
40 - 59	71	85	49	63
60	52	59	36	35
All Ages	68	77	45	65

The results indicate that females in the youngest and oldest age groups were less likely to have had an MBE within the previous year. Similar patterns of association were also observed in the case of the other three dimensions of cancer screening practices among women in Alberta.

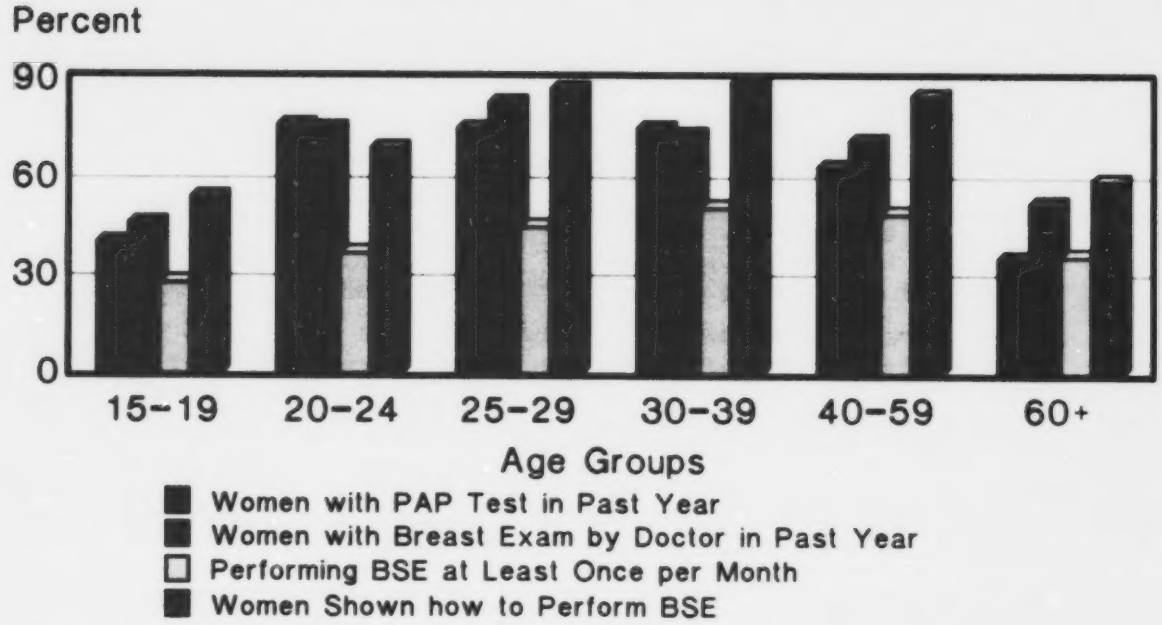
It is important to note that only one in two women aged 60 years or over have had a medical breast examination in the previous year. Moreover, only one in three women (36%) in this age group examined their breasts every month.

4.7.2 Socio-Economic Factors and Cancer Screening Among Women

Cancer screening patterns among Alberta women in relation to selected socio-economic characteristics of the respondents are shown in table 4.7.2 and accompanying charts.

Chart 4.7.1

Cancer Screening Among Alberta Women
General Information (1985 Estimates)
Age Distribution



Health Promotion Survey, 1985

The proportion of women performing BSE at least once every month was higher among the middle levels of education (completed secondary, community college and some university) when compared to lowest and highest educational levels, thus indicating a curvilinear association between the variables. The data shown in table 4.7.2 also suggest that a similar curvilinear association existed between level of education and the other two dimensions of cancer screening among women. Thus, the proportion having had an MBE in the previous year as well as the proportion who have had a PAP smear test during that period both tend to be higher among women with middle levels of education, when compared to those with the lowest and highest levels of education.

The results indicate that the proportion of women who performed BSE at least once a month tends to increase with reported household income. On the other hand, among Alberta women with the highest level of household income, the proportion who have had a PAP smear test in the previous year was lower when compared to women at lower income levels.

The findings also suggest that working women were more likely to perform BSE at least once every month when compared to those who were looking for work. Similar patterns of association were also observed between working status and the other two measures of cancer screening.

The percent of women who performed BSE at least once a month was highest in the 'sales/service' occupations. Women who were employed in the clerical occupations had the highest proportion of those who have had an MBE in the previous year. The proportion of those who have had a PAP smear test in the previous year was higher among the 'Clerical' and 'Professional' groups when compared to other occupational categories.

Table 4.7.2

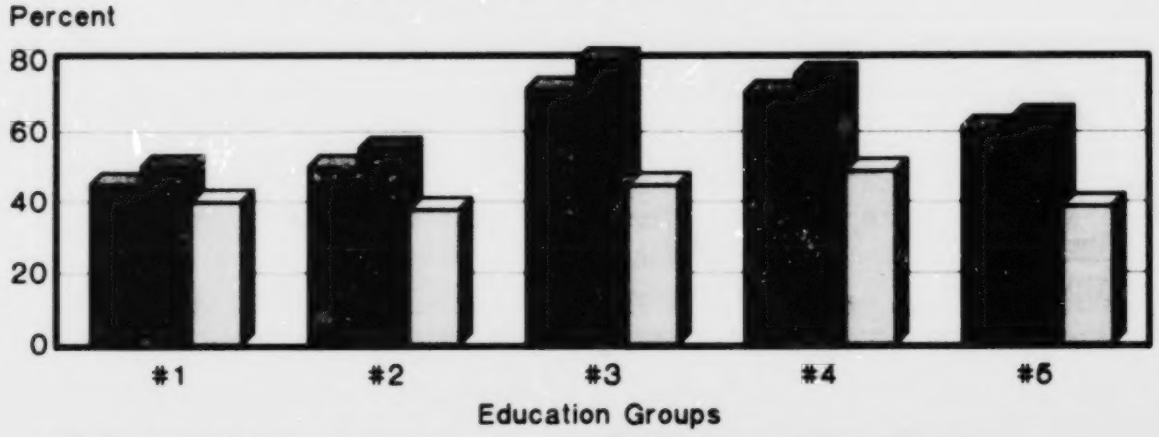
CANCER SCREENING PATTERNS BY EDUCATION, HOUSEHOLD INCOME, WORKING STATUS AND OCCUPATION

(Estimated %)

Socio-Economic Characteristics	Performing BSE Once a Month (%)	Medical Breast Examination in the Previous Year (%)	PAP Smear Test in the Previous Year (%)
Education			
Elementary/No School	40	50	45
Some Secondary/Other Education	38	55	50
Completed Secondary	45	80	72
Any Community College/Some University	49	76	71
Completed University	39	64	61
Household Income			
Less than $20,000/year	37	64	65
$20,001 - $40,000/year	47	73	64
$40,001 - $60,000/year	44	77	67
more than $60,000	52	73	60
Working Status			
Housekeeper	46	72	65
Looking For Work	31*	60*	57
Student/Retired	32	50	42
Working	47	75	70
Occupation			
Management	42	76	69
Professional	50	74	75
Clerical	43	80	76
Sales/Service	58	73	67
Farming/Processing	***	***	***
Other	***	58	48**

Chart 4.7.2 (a)

Cancer Screening Among Alberta Women
(1985 Estimates)
Education Distribution



■ PAP Test in Past Year
□ BSE Once per Month
■ BR Exam in Past Year

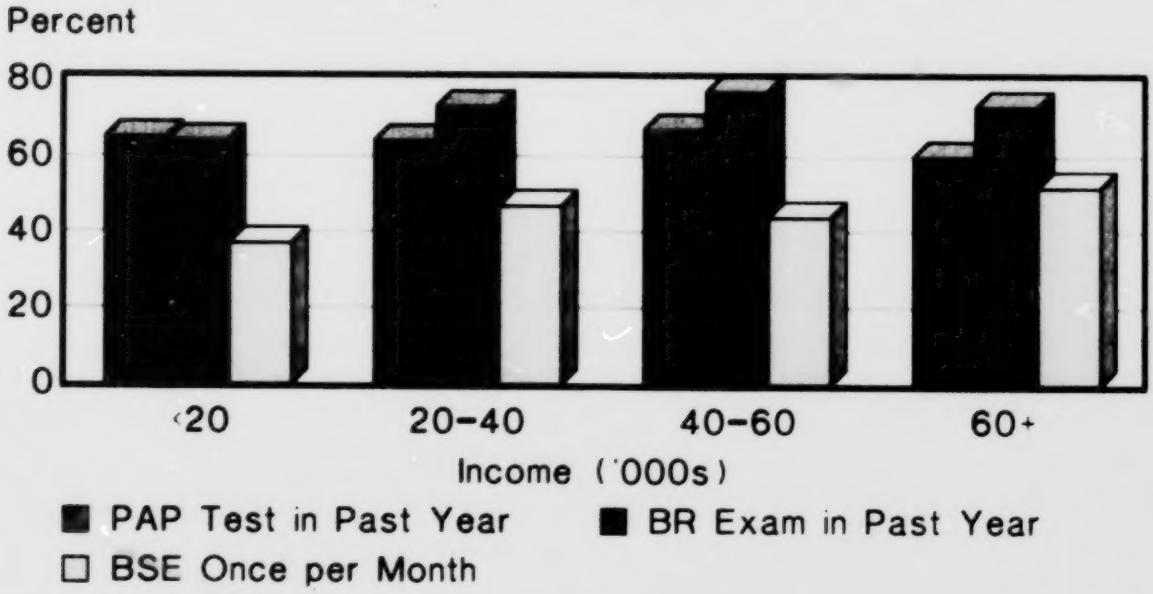
Education Groups

#1-Elementary/No School
#2-Some Sec/Other Education
#3-Complete Secondary
#4-Any Comm Coll/Some Univ
#5-Complete University

Health Promotion Survey, 1985

Chart 4.7.2. (b)

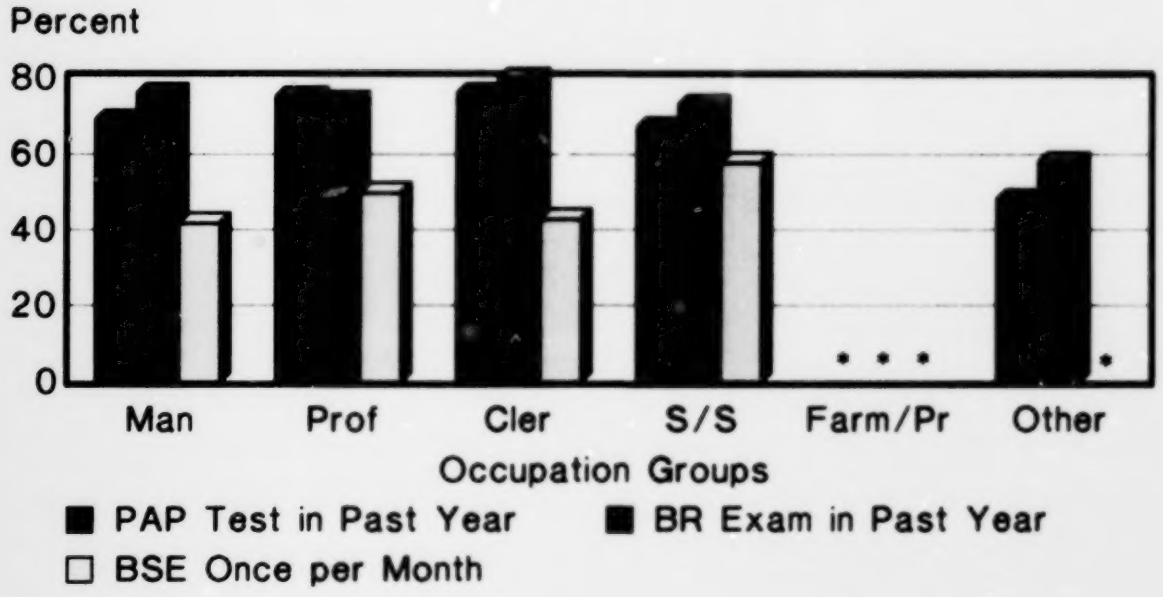
Cancer Screening Among Alberta Women
(1985 Estimates)
Income Distribution



Health Promotion Survey 1985

Chart 4.7.2 (c)

Cancer Screening Among Alberta Women (1985 Estimates) By Occupation Groups



Health Promotion Survey, 1985

4.7.3 Other Findings and Concluding Observations on Cancer Screening

The results also show that women who have had an MBE during the previous year were more likely to perform a BSE at least once every month when compared to those who did not have an MBE during that period. Thus, 51% of the former performed BSE at least once a month when compared to only 31% of latter. Moreover, an estimated 9% of women did not have an MBE during the previous year and never practised BSE. This translates to approximately 76,000 women in the province.

It is also noteworthy that women who reported having been shown how to examine their own breasts were much more likely to perform BSE regularly (see Table 4.7.3).

TABLE 4.7.3

PROPORTION PERFORMING BSE BY WHETHER OR NOT THEY REPORTED THEY WERE SHOWN HOW TO DO BSE
(Estimated %)

BSE Shown?	Proportion Performing BSE At Least Once a Month	Proportion Never Performing BSE
Yes	52%	9%
No	18%	55%

The survey finding also indicate that almost 2 out of 3 women who did not know how often women should perform BSE never performed it. This suggests that there is some room for improvement through education in the area of monthly breast examinations.

It should also be noted here that women who reported having their breasts examined in the previous year by a nurse or a doctor were much more likely to have had a PAP smear test in the same period than women

who reported not having had such an MBE in the previous year (83% compared to 22%).

Only about one half (52%) of Alberta women who reported that they have been shown how to peform BSE performed it the recommended frequency of once every month. This suggests that a significant proportion of women may not have been taught this method of screening for breast cancer effectively. Similar findings were also reported in the Edmonton survey[2]. It should be noted in this context that the Canadian Task Force on Periodic Health examination has also emphasized the need for studies to evaluate BSE[31].

Overall women in Alberta compare favourably to women in Canada as a whole in terms of their frequency of performing BSE and having an annual MBE. Moreover, the percent of women who have had a PAP smear test during the previous year was also higher in Alberta when compared to the national estimate. However it must be noted that the result from the National Health Interview Survey[32] carried out in the United States last year indicated that only 7% of women of all ages have never had a PAP smear test in that country. The corresponding figure for Alberta was 11%. This suggests that there is some room for improvement in this area as recommended by the Canadian Task Force on Cervical Cancer Screening Programs[33].

4.8 GENERAL HEALTH PERCEPTIONS

In order to evaluate the subjective dimension of individuals concerning their health status, respondents were asked how their health compared, in general, to others in their age group. In Alberta, 61% believed that their health was very good or excellent compared to others in the same age group. Only 3% feel that their health compared poorly to others.

It is noteworthy that almost two out of three Albertans believed they make more of an effort to improve their health status compared to their peers.

How happy are Albertans? The survey shows that 38% consider themselves to be "very happy", and 59% "pretty happy". Only 3% of Albertans see themselves as "not too happy" and this is very similar to the findings of the Edmonton survey[12] and estimates for Canada as a whole.

4.8.1 Demographic Factors in Perceived Health and Happiness

Both men and women in Alberta exhibit somewhat similar patterns as far as perceived health status is concerned, as table 4.8.1(a) shows. However, Alberta women perceive themselves to be "very happy" more often than males, as table 4.8.1 (b) indicates. This table also shows that a slightly higher proportion of women (4%) felt that they were not too happy when compared to men (3%).

In general perceived health status deteriorated with age. More importantly, less than half the Albertans over the age of 65 see themselves to be in excellent or very good health as compared to others in their own age group. Furthermore older Albertans rated their health as poor more often than the younger generation.

Reported level of happiness also tends to follow the same pattern of relationship with age. Compared to unmarried Albertans, the married ones were more likely to report that they were extremely happy (39% and 36% respectively). Conversely, unmarried persons were, when compared to married people, more likely to report that they were not too happy (5% and 3%* respectively).

The senior citizens in Alberta appear to be less happy when compared to seniors in Canada as a whole. Thus, while 38% of the individuals aged 65 and over in Canada reported that they are extremely happy, only 25% of Albertans in the same age group did so.

Table 4.8.1(a)

PERSONAL HEALTH RATINGS OF ALBERTANS WHEN COMPARED TO THEIR PEER GROUP BY SEX OF REPSONDENT

(Estimated % and Numbers)

Health Perception	Proportion (%)		Number of Albertans	
	Males	Females	Males (in '000s)	Females (in '000s)
Excellent or Very Good	59	62	525	540
Good or Fair	38	34	337	301
Poor	3*	4	25	30
Total	100	100	889 (rounded)	871 (rounded)

Table 4.8.1(b)

HAPPINESS LEVELS BY SEX AS REPORTED BY ALBERTANS

(Estimated % and Numbers)

Happiness Level	Proportion (%)		Number of Albertans	
	Males	Females	Males (in '000s)	Females (in '000s)
Very Happy	34	42	304	363
Pretty Happy	63	54	559	477
Not Too Happy	3*	4	26	32
Total	100	100	889	872

4.8.2 Socio-Economic Status and Perceived Health and Happiness

The survey results indicate that Albertans with higher levels of education were more likely to report being 'very happy' than those with lower levels of education. As table 4.8.2 shows, among those with no schooling or only elementary education, only 23% reported that they were "very happy". The corresponding proportion for Albertans with completed secondary education or higher, was 42%. The findings also suggest that perceived level of individual health status also increased with level of education.

The proportion reporting to be "very happy" also increased as the level of household income increased. Moreover, as table 4.8.2 and accompanying charts show, the impact of household income on perceived happiness appeared to be more pronounced than that of education. The data also show that the proportion reporting 'excellent' or 'very good' health increased with household income. Only about half (53%) of the survey population with an household income of $20,000 or less felt that their health was excellent or very good relative to others in their age group. On the other hand more than three-quarters (76%) of Albertans with the highest level of income reported that their health was excellent or very good.

The level of happiness as well as perceived health status tended to be lower among the unemployed than the employed Albertans. Thus, only 25% of those who were looking for work felt that they were very happy, compared to 41% for working people. A similar pattern is observed in the case of perceived health status. While 67% of the employed felt their health to be excellent or very good, only 47% of those who were looking for work reported such a health status. Among the occupational groups, both the level of happiness and perceived health status appeared to be slightly higher among the 'clerical' category.

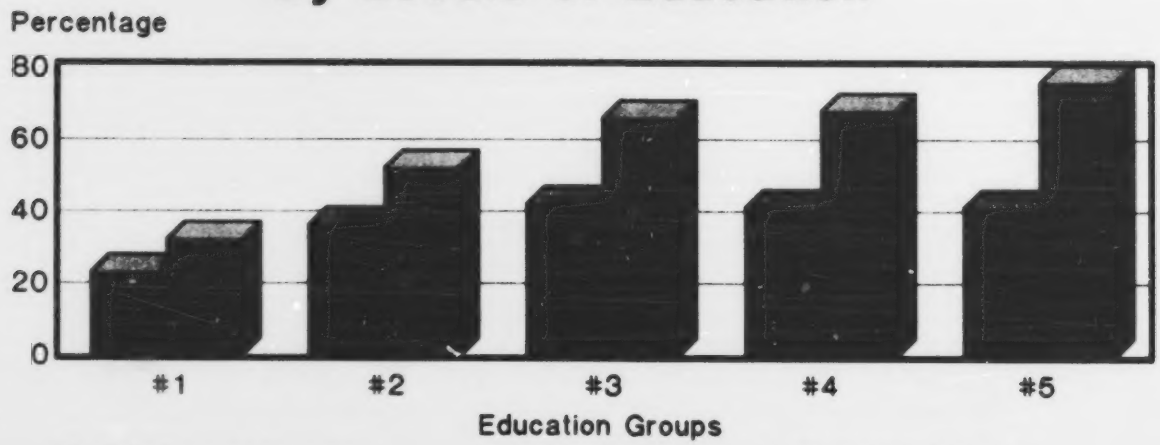
Table 4.8.2

PERCEIVED HEALTH AND HAPPINESS
BY EDUCATION, HOUSEHOLD INCOME AND
WORK STATUS OF ALBERTANS
(Estimated %)

Socio-Economic Characteristics	Those Who Reported Being Very Happy (%)	Those Who Perceived Their Health to be Excellent or Very Good (%)
Completed Education		
1) Elementary/No School	23	32
2) Some Secondary/Other Education	36	52
3) Completed Secondary	42	66
4) Any Community College/ Some University	41	68
5) Completed University	41	76
Household Income		
1) Less than $20,000/year	30	53
2) $20,000 - $40,000/year	39	63
3) $40,000 - $60,000/year	40	71
4) $60,000/year and over	43	75
Working Status		
1) Housekeeper	37	59
2) Looking For Work	25*	47
3) Student/Retired	36	50
4) Working	41	67
Occupation		
1) Management	39	67
2) Professional	43	69
3) Clerical	51	74
4) Sales/Service	39	62
5) Farmers/Processing	38	67
6) Others	32	60

Chart 4.8.2 (a)

Perceived Health and Happiness In Alberta By Levels of Education



■ Being Very Happy

■ Perceived Their Health to be Excellent or Very Good

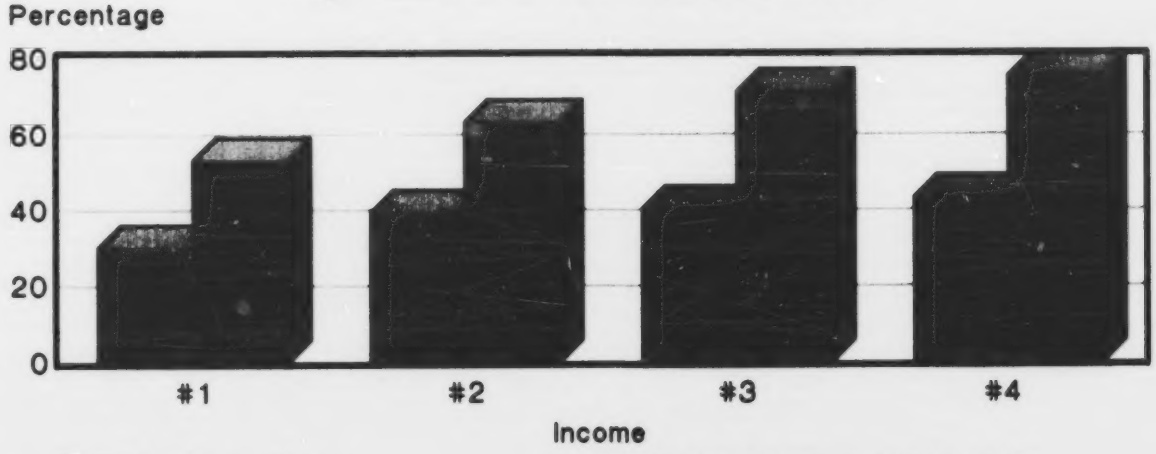
Education Groups

#1-Elementary/No School
#2-Some Sec/Other Education
#3-Complete Secondary
#4-Any Comm Coll/Some Univ
#5-Complete University

Health Promotion Survey, 1985

Chart 4.8.2 (b)

Perceived Health and Happiness In Alberta By Levels of Household



■ Being Very Happy

■ Perceived Their Health to be Excellent or Very Good

#1-Less than 20,000
#2-20,000 - 40,000
#3-40,000 - 60,000
#4-60,000 + Per Yr

Health Promotion Survey, 1985

4.8.3 Long Term Health Problems Which Limit Physical Activity

Respondents were asked whether they were limited in the kind or amount of activity they could do because of long-term physical condition or health problem lasting or expecting to last more than six months. Table 4.8.3 presents the results for Alberta and Canada by age groups and sex. The findings show that almost one in six Albertans (16%) reported such long term activity limitation. The proportion who were limited in their physical activity due to long term health problems was higher among females (19%) than males (14%). Moreover, the estimates for Alberta and Canada were identical on this measure of physical disability.

The proportion reporting physical activity limitation increased with age and almost four (38%) in ten elderly Albertans reported such long term disability. More importantly, it should be noted that, among the elderly, irrespective of gender, a higher proportion in Alberta than Canada reported such limitation.

Table 4.8.3

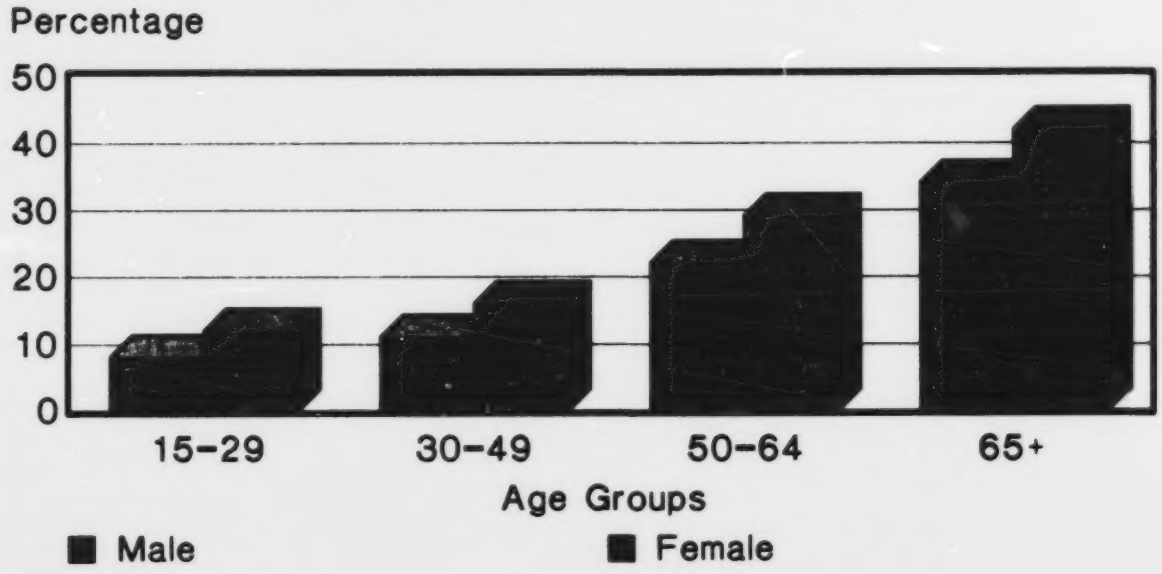
PERCENT REPORTING LONG TERM HEALTH PROBLEMS WHICH LIMIT PHYSICAL ACTIVITY, BY AGE AND SEX: ALBERTA AND CANADA

(Estimated %)

AGE GROUP	ALBERTA (%)			CANADA (%)		
	Male	Female	Total	Male	Female	Total
15 - 29	8	12	10	7	10	8
30 - 49	11	16	14	10	15	13
50 - 64	22	29	26	23	25	24
65+	34*	42	38	31	37	34
All Ages	14	19	16	14	19	16

Chart 4.8.3

Proportion of Albertans Reporting Long-Term Conditions that Limited Activity By Age Groups and Sex



Health Promotion Survey, 1985

4.8.4 Health Improvement: Intentions and Attitudes

A majority (71%) of Albertans believed that they should personally do something to improve their physical health. In this context 56% of Albertans felt that they should exercise more to improve their health. Stop smoking (16%), improve eating habits and losing weight were mentioned less often.

A slight majority (52%) of Albertans indicated that there was nothing to stop them from taking steps to improve their health. The reasons given most frequently for not making personal health improvement included:

	Lack of Time	(18%)
and	Lack of Self Discipline and Energy	(16%)

4.8.5 Health Topic Information and The Role of Government

Among Albertans 19% felt that they need more information on certain topics. In this context the need for information concerning nutrition was cited most frequently. This was followed by topics relating to safety and accident prevention, mental health and high blood pressure.

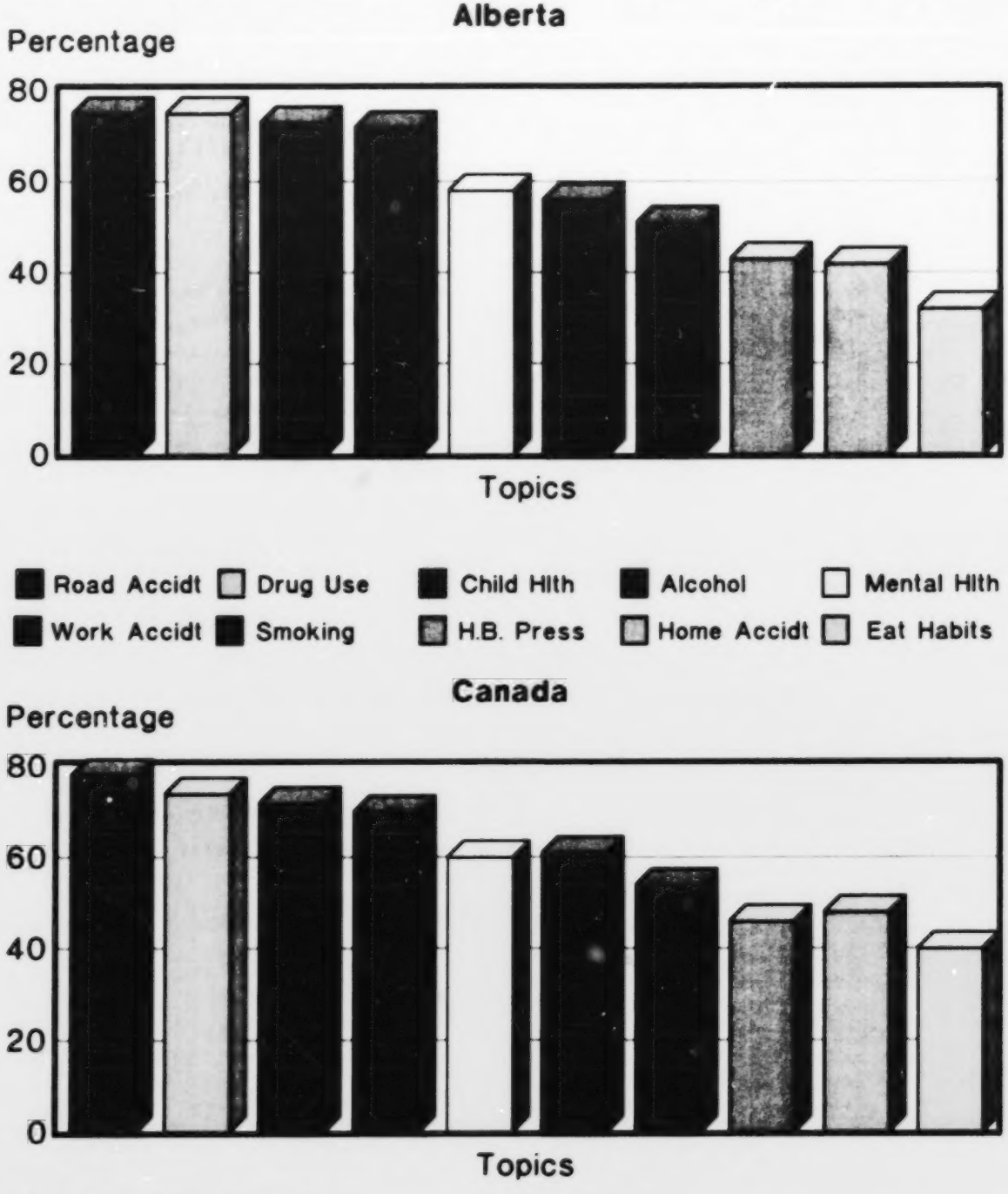
These findings are very similar to those observed in Edmonton. Those surveyed from Alberta were also asked their opinion as to how important a role the government should play in dealing with various health related topics. These opinions were scored on a scale from 1 to 10 with higher values indicating greater degree of importance. In general Albertans felt that the following areas were especially important (scores 8 - 10):

	Road Accident Prevention	(75%)
	Drug Use	(75%)
	Child Health Care	(73%)
and	Alcohol Problem	(72%)

The estimates relating to other topics, both for Alberta and Canada are shown in Chart 4.8.5.

Chart 4.8.5

Those Who Felt it was Particularly Important for the Government to Deal with Selected Health Topics (Estimated %)



Health Promotion Survey, 1985

4.8.6 Concluding Comments on General Health Perception

Overall the results suggest that a good majority of Albertans perceived themselves to be healthy and happy. However, senior citizens in Alberta appear to be less happy when compared to similar groups in Canada.

In every age group, a higher proportion of women in the province, when compared to men, tend to report long term health problems which limit physical activity. It is also noteworthy that almost one out of three elderly Albertans appear to have such health problems. Moreover, a higher proportion of seniors in Alberta, when compared to Canada, report the existence of such long term physical disability. This pattern is found among both males and females within the province. In general, perceived happiness and self-reported health status appear to improve with socio-economic status.

By and large, the results also indicate that Albertans place great emphasis on the government playing an important role in accident prevention on the road, drug and alcohol problems, and child health care.

4.9 STRESS

Many research studies have reported the negative health consequences of prolonged and unremittent stress. Such stressful life situations often result in both physical and mental health problems. In the realm of physical health stress could lead to cardiovascular disease, ulcers, headaches and fertility problems[34]. On the mental health side, depression, sleeping difficulties and many socio-emotional problems could be attributed to the continued presence of stressful life situations[35,36]. The survey respondents were asked whether they would describe their life as very stressful, fairly stressful, not very stressful or not at all stressful.

The results suggest that one in ten Albertans (10%) considered their lives to be very stressful. Another 40% of Albertans believed that their lives were fairly stressful. This amounts to roughly 701,000 Albertans who lived under more or less stressful conditions. The results for the province and the county are shown in table 4.9.0.

Table 4.9.0

Reported Level of Stress:
Alberta and Canada
(Estimated %)

Stress Level	Alberta	Canada
Very stressful	10	9
Fairly stressful	40	39
Not very stressful	40	39
Not at all stressful	10	13
Total	100	100
(Weight N: in '000)	(1762)	(19611)

As the table shows, one half of Albertans described their lives as very or fairly stressful when compared to 48% nationwide. Only 29% of Albertans believed that they should be doing something personally to improve the way they coped with stress. Among the nationwide sample 31% believed that they should be doing something to cope with stress.

4.9.1 Demographic Factors and Stress

Life stress levels as reported by males and females in the province are shown in table 4.9.1(a).

Table 4.9.1(a)

Reported Life Stress Levels By Sex
(Estimated Percent and Numbers)

Stress Level	Male (%)	Female (%)	Total Pop. (%)	Estimated Number (000's) Male	Female
Very stressful	11	9	10	100	81
Fairly stressful	41	39	40	365	337
Not very stressful	37	43	40	328	373
Not at all stressful	10	9	10	92	87
Total	100	100	100	885	878

Note: Totals rounded to 100.

The results indicate that 52% of males in Alberta felt that their lives were very or fairly stressful, compared to 48% of females. Table 4.9.1(b) shows the sex and age distribution of the proportion of individuals with stressful life situations.

A curvilinear association is indicated between age and degree of stress, with teenage and elderly Albertans recording a lower proportion of those who lead stressful lives. This pattern was observed among both men and women in the province.

Table 4.9.1(b)

PROPORTION OF RESPONDENTS WHO REPORTED LEADING VERY OR FAIRLY STRESSFUL LIVES, BY SEX AND AGE GROUP

(Estimated %)

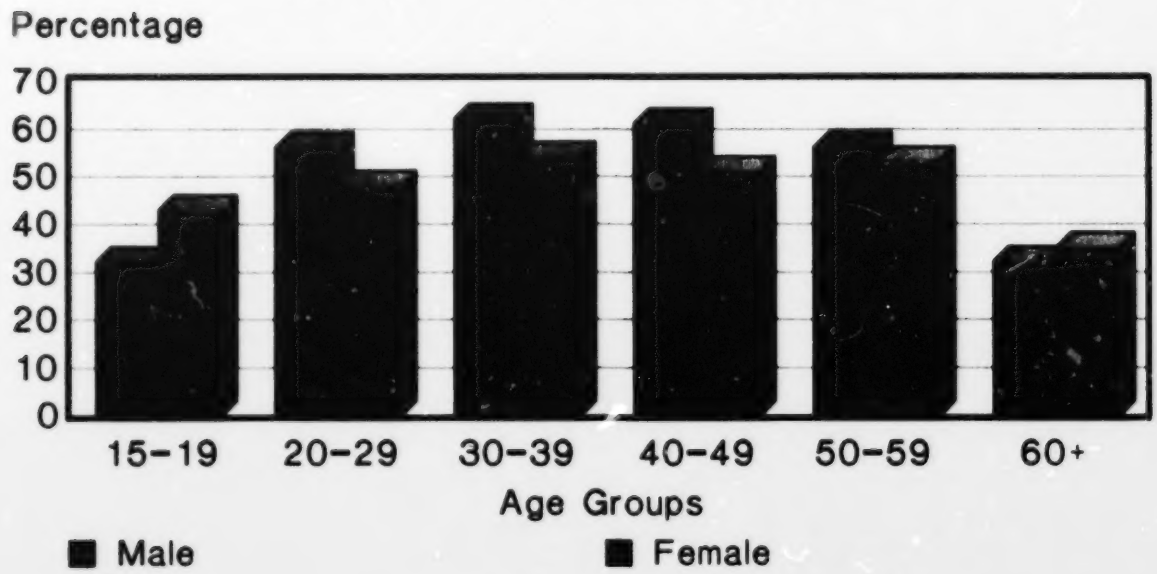
Age Group	Male (%)	Female (%)	Both Sexes (%)
15 - 19	32	43	37
20 - 29	56	48	53
30 - 39	62	54	60
40 - 49	61	51	56
50 - 59	56	53	55
60+	32	35	33
All Ages	52	48	50

It must be noted that among teenagers and elderly, women appear to be under greater stress than men. On the other hand, among those aged 20 - 59, men appear to lead more stressful lives than women. It is also noteworthy that a higher proportion of women, when compared to men, believed that they should be doing something personally to improve the way they deal with stress; the corresponding figures being 31% and 28% respectively.

The results also indicate that a higher proportion of married Albertans reported that their lives were very or fairly stressful, when compared to unmarried people. Thus 53% of married Albertans reported their lives to be very or fairly stressful when compared to 47% of unmarried Albertans.

Chart 4.9.1 (b)

Albertans Reporting Very or Fairly Stressful Livestyles By Age Groups and Sex



Health Promotion Survey, 1985

4.9.2 Socio-Economic Factors and Stress

Table 4.9.2 presents the findings concerning reported stress level by education, household income, work status and occupation.

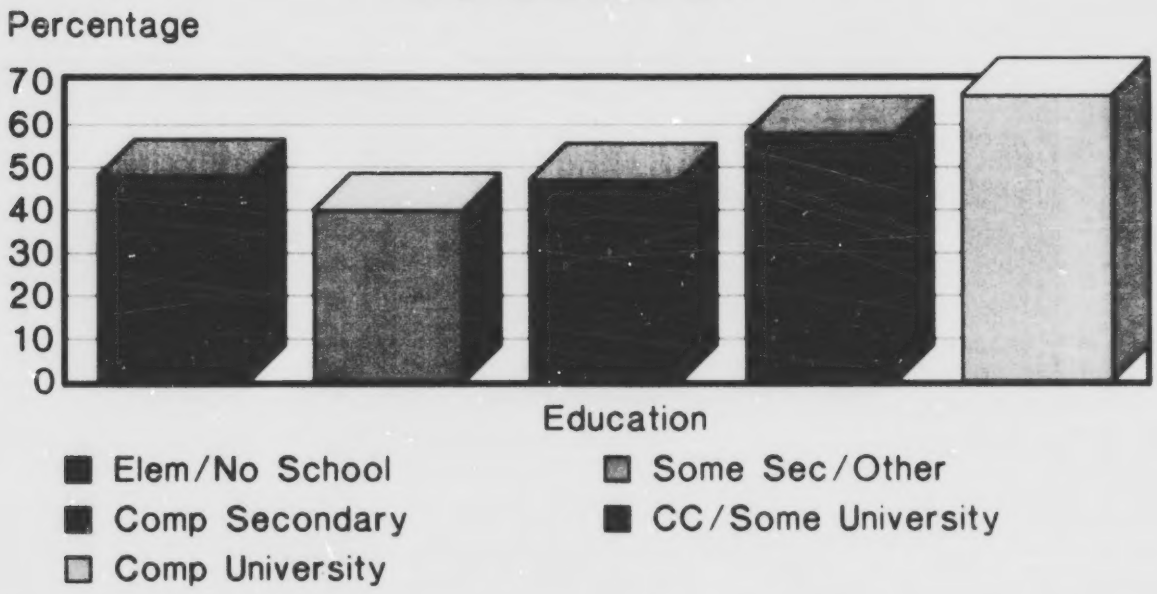
Table 4.9.2

REPORTED STRESS LEVELS
BY EDUCATION, HOUSEHOLD INCOME, WORK STATUS
AND OCCUPATION OF ALBERTANS
(Estimated %)

Socio-Economic Characteristics	Those Describing Their Lives as Very or Fairly Stressful (%)
Completed Education	
1) Elementary/No Schooling	48
2) Some Secondary/Other	40
3) Completed Secondary	47
4) Any Community College/Some University	58
5) Completed University	67
Household Income	
1) Less than $20,000	49
2) $20,000 - $40,000	53
3) $40,000 - $60,000	55
4) More than $60,000	59
Work Status	
1) Housekeeper	43
2) Looking for Work	51
3) Student/Retired	38
4) Working	57
Occupation	
1) Management	66
2) Professional	70
3) Clerical	46
4) Sales/Service	53
5) Farming/Processing	53
6) Other	50

Chart 4.9.2 (a)

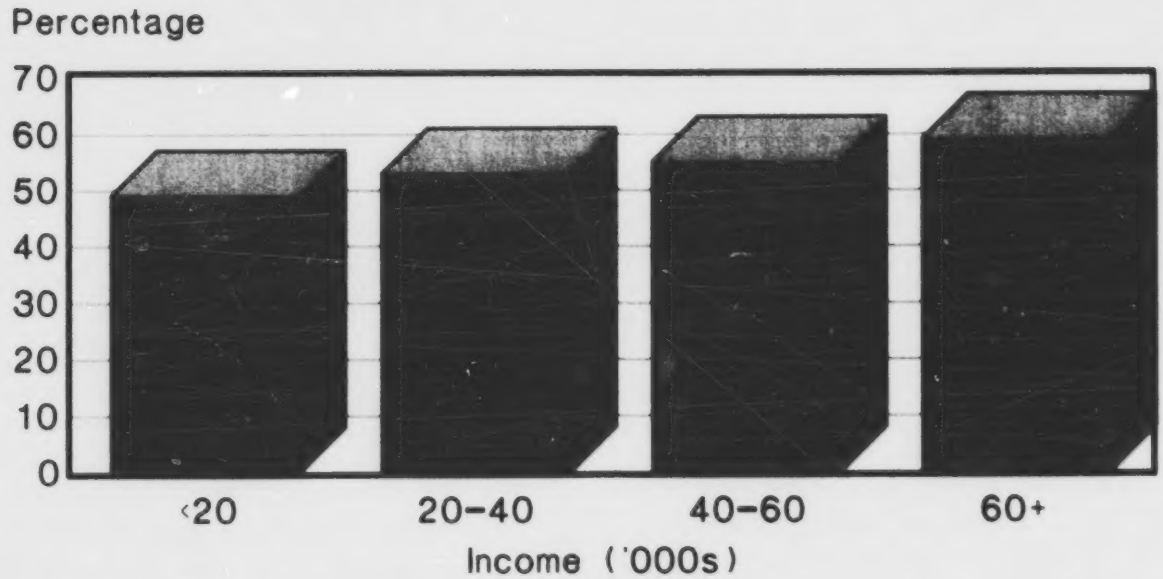
Albertans Who Reported Leading Very or Fairly Stressful Lives By Education



Health Promotion Survey, 1985

Chart 4.9.2 (b)

Albertans Reporting Very or Fairly Stressful Lives By Income Levels



Health Promotion Survey, 1985

The proportion of respondents who reported leading stressful lives was greater among those with higher levels of education. Thus, overall the level of stress tended to increase with education. More importantly, almost two out of every three Albertans with completed university education reported that they have had 'very' or 'fairly' stressful lives.

Stress levels also increased slightly as the household income of the respondents increased. The data also indicate that working people were slightly more stressed than those who were looking for work.

Among the occupation groups considered in this analysis, professionals appeared to lead the most stressful lives, followed closely by those in management type of occupations. People who were employed in clerical occupations were the least stressed.

4.9.3 Other Findings Related To Stress

An examination of the relationship between the reported level of stress and some of the other selected factors indicated the following findings.

- Happiness and Stress: Among those who considered themselves to be very happy, only 45% felt that their lives were 'very' or 'fairly' stressful. On the other hand, 84% of the 'not too happy' Albertans described their lives as stressful.

- Among Albertans who believed that they should be doing something personally to improve the way they coped with stress, 53% mentioned that learning to relax and worrying less was the most important way to cope with stress. Exercising more (16%) and socializing (10%) were the other methods of coping with stress that were mentioned.

4.10 NUTRITION AND DIETING

Good nutritional practice plays an important role in maintaining and improving individual health status. Poor eating habits often lead to heart disease, high blood pressure, diabetes, osteoporosis and cancer of breast and colon[37]. Respondents in the survey were asked "Do you think that you could improve your health by changing your eating habits?".

The results indicate that 68% of Albertans felt that they could improve their health by changing their eating habits. However, only 13 percent of the survey population expressed an intention to improve their eating habits in the 'next year'.

Another aspect of poor eating habits which may lead to health problems is being overweight. Body Mass Index (BMI) is a measure often used to classify people according to desirable weight categories. Individuals were classified as overweight if they had a BMI (weight in kilograms divided by height in meters squared) of more than 27.2 for males and 26.9 for females. It should be noted here that these figures were rounded to 27, due to sampling variability. Past studies have established that this cut off point corresponds to being at least 20% above desirable weight[38]. This classification is therefore useful to identify those with increased risk of health problems associated with overweight.

The survey findings indicate that almost one in six Albertans (17%) was overweight. This provincial estimate is not significantly different from the estimate for Canada which was 16%.

4.10.1 Demographic Factors in Attitude Toward Nutrition and Overweight

An equal proportion of males and females in the province (68%) believed that they could improve their health by changing their eating habits. However, the belief that changing dietary habits plays an important role in improving health appears to diminish with age as table 4.10.1(a) shows.

Table 4.10.1(a)

Age Distribution of Albertans Who Believed That They Could Improve Their Health by Changing Their Eating Habits

Age Group	Estimated %	Estimated Number ('000)
15 - 24	78	325
25 - 34	71	343
35 - 44	71	224
45 - 54	70	149
55 - 64	58	99
65+	37	61
All Ages	68	1201

It is important to note that only about one in three elderly Albertans considered changing eating habits as an important dimension contributing to improved health.

Among males in Alberta, 19% were found to be overweight. Compared to this only 14% of females in the province were overweight. As table 4.10.1(b) indicates a similar pattern was also observed for Canada as a whole.

The results also suggest that in general the proportion of overweight people increased with age. A higher proportion of married Albertans were overweight (18%) when compared to the unmarried (14%) in the province.

Table 4.10.1(b)

DISTRIBUTION OF RESPONDENTS WHO WERE OVERWEIGHT, BY SEX AND AGE
ALBERTA AND CANADA
(Estimated%)

Age Group	Alberta (%)			Canada (%)		
	Total Pop.	Male	Female	Total Pop.	Male	Female
15 - 24	8	9*	7*	8	8	7
25 - 29	14	17	***	11	12	10
30 - 39	17	22	13*	15	19	11
40 - 59	24	26	21	22	27	18
60+	22	21	22	22	22	21
All Ages	17	19	14	16	18	14

4.10.2 Socio-Economic Factors In Overweight

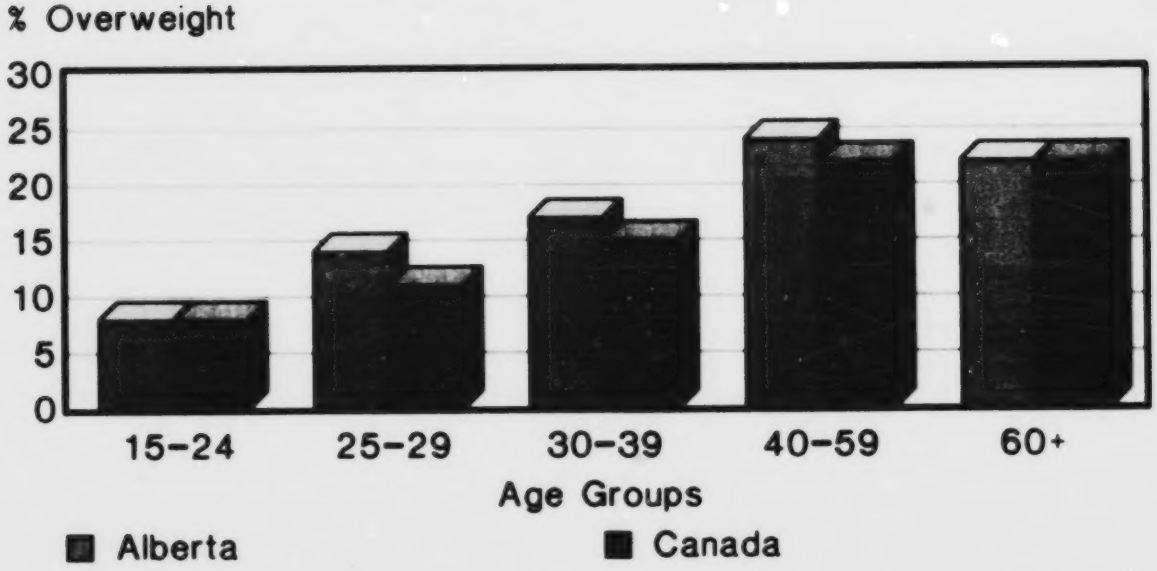
Table 4.10.2 shows the percentage of overweight people by level of education, household income, work status and occupational categories.

As the results show, among Albertans with the lowest level of education almost one in three (32%) were overweight. The proportion of overweight people did not vary among the other four higher levels of education. Thus, only about one in seven Albertans (15%) with more than elementary schooling was overweight.

Proportion of overweight individuals appears to be lower among the higher income groups. An equal proportion of those who were looking for work were overweight as those who were working.

Chart 4.10.1 (b) - 1

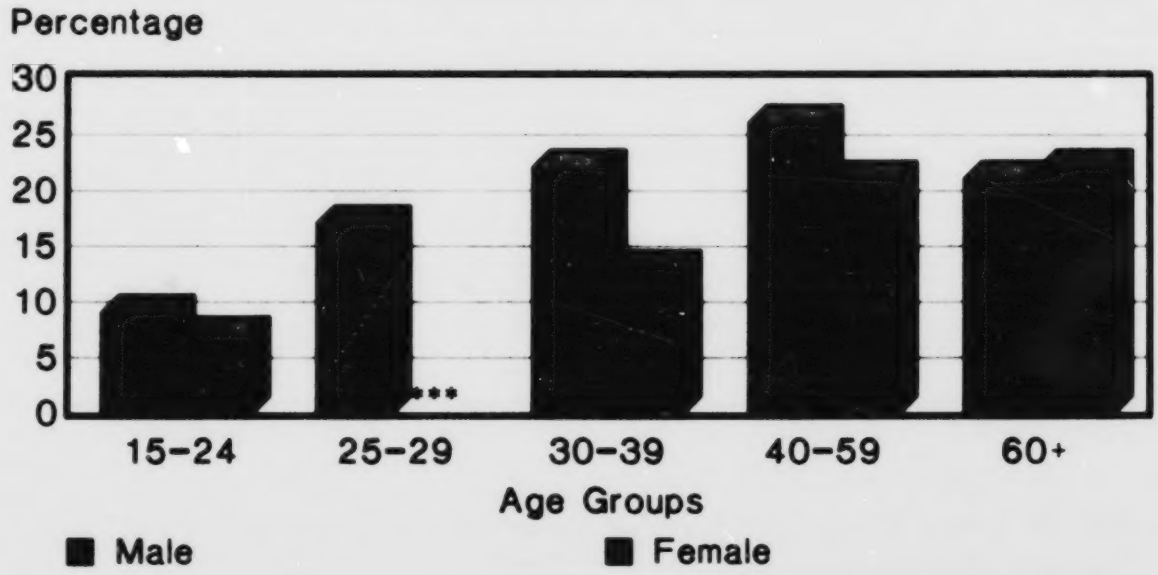
Respondents Found to be Overweight, Alberta and Canada By Age Groups



Health Promotion Survey, 1985

Chart 4.10.1 (b) - 2

Respondents Found to be Overweight, Alberta by Age and Sex



Health Promotion Survey, 1985

Table 4.10.2

OVERWEIGHT PEOPLE
BY EDUCATION, HOUSEHOLD INCOME, WORK STATUS AND OCCUPATION
(Estimated %)

Socio-Economic Characteristic	' Those Found to be Overweight from Computed Body Mass Index (%)
Completed Education	
1) Elementary/No Schooling	32
2) Some Secondary/Other	15
3) Completed Secondary	15
4) Any Community College/Some University	14
5) Completed University	15
Household Income	
1) Less than $20,000	21
2) $20,000 - $40,000	20
3) $40,000 - $60,000	19
4) More than $60,000	14*
Work Status	
1) Housekeeper	18
2) Looking for Work	17*
3) Student/Retired	12
4) Working	17
Occupation	
1) Management	16*
2) Professional	15*
3) Clerical	10*
4) Sales/Service	21
5) Farming/Processing	19*
6) Other	20

Among the occupational categories examined here, 'sales/service' group recorded the highest proportion of overweight individuals - 21% - when compared to clerical occupations with only 10% overweight. This difference could largely be due to the demographic composition of these occupational groups.

4.10.3 Attitude Towards Nutrition and Dieting: Other Findings

A set of three "agree-disagree" statements concerning dieting and nutrition attitudes was presented to all respondents. Table 4.10.3 presents the results related to these items categorized by sex and overweight status.

Table 4.10.3

ALBERTANS AGREEING TO SELECT ATTITUDINAL ITEMS ON NUTRITION AND DIETING: ESTIMATED PERCENT BY SEX AND BY OVERWEIGHT STATUS

(Estimated %)

Attitudinal Item	Those Agreeing To The Item				
	Total Pop.	Male	Female	Not over-weight	over-weight
1. Following a healthy diet is expensive and time consuming	24	22	26	21	36
2. I'd rather be overweight than have to give up many of the foods I like	8	11	6	5	21
3. Skipping breakfast is an effective way to control or reduce your weight	9	10	7	9	9

As the results show, a slightly higher proportion of women than men believed that following a healthy diet is expensive and time consuming. On the other hand men were slightly more likely than women to be overweight rather than having to give up many of the foods they liked.

A slightly higher proportion of men than women believed that skipping breakfast was an effective way to control or reduce weight.

As table 4.10.3 shows, overweight Albertans were more likely than those who were not overweight to believe that a healthy diet is expensive and time consuming. Similarly, overweight people were less likely than those who were not overweight to give up foods they liked in order to reduce weight.

Some of the other findings related to nutrition and dieting were:

- When asked, "what was the single most important thing you have done in the past year to improve your health?", 10% of Albertans mentioned improved eating habits. Another 6% cited losing weight as the most important thing they have done to improve their health.

- Almost two out of three Albertans believed (62%) that there were certain types of foods they should limit or avoid for the sake of their health. In this context, food high in fat was mentioned most often (20%) followed by foods high in sugar (17%) and foods high in cholesterol (16%).

- Among the survey population of the province overall, 63% believed that there were certain types of foods that they should eat more often to improve their health. Almost one in two Albertans reported that they should eat fruits and vegetables more often so as to improve their health.

- Even though 78% of all overweight Albertans felt their health could be improved by changing their eating habits, only 13% intended to take this step in the 'coming year'.

- While almost half the overweight women (45%) expressed their intention to lose weight to improve their health, only one in five (20%) overweight men expressed such an intention.

- The proportion of overweight people who reported that they exercised three or more times a week was identical among men and women (55%). However, this figure was slightly lower than that observed among the overall survey population (63%).

- Almost one in five (18%) Albertans reported having nothing or just coffee or tea for breakfast on 6 to 7 days a week. While the type of breakfast consumed cannot be easily documented using the present data, the common type of breakfast in Alberta consisted of bread and cereals with the inclusion of fruits/juice and/or dairy products.

4.10.4 Concluding Comments On Nutrition, Dieting and Overweight

A good majority of Albertans thought that they could improve their health by changing their eating habits. However, the intent to improve eating habits in the next year was held by only 13%. The belief that changing dietary habits played a significant role in health improvement tended to decline with age.

The results of the survey also suggest that the proportion of overweight people in the province was similar to that observed in the country as a whole. Comparatively more males than females in the province were overweight, and in general this proportion increased with age. Being overweight also tended to be more common among Albertans with the lowest level of education and income compared to higher socio-economic levels.

The view that there is a need to limit or avoid certain types of food was held by a good majority of people in the province. Moreover, there was significant interest among the population to reduce fat, cholesterol and sugar intake. Albertans also want more information on nutrition, as 53% of those who wanted information on health related topics mentioned nutrition as the area requiring such information.

Overall, Albertans appear to regard good nutrition and dietary habits as a significant aspect of healthy life style. They are also aware that changes in eating habits as well as more specific changes in foods chosen should be made to improve health. However, past and planned actions reported by the respondents are not always congruent with this general perception of the need for change in this area.

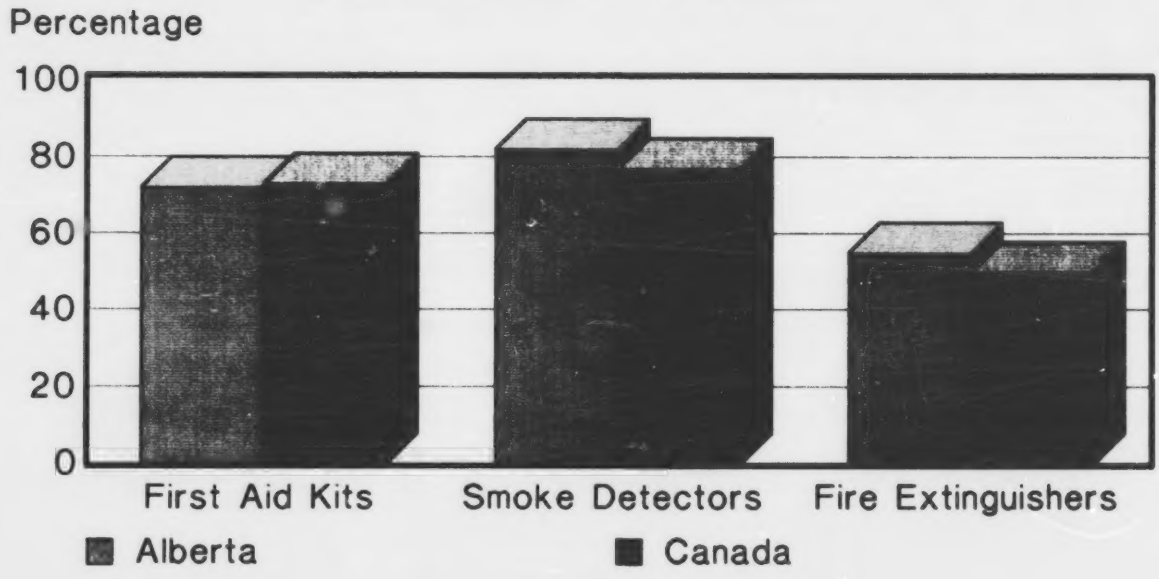
4.11 FIRST AID AND SAFETY IN THE HOME

The participants in the survey were asked a few questions relating to training and ability to administer first aid as well as the presence of safety equipment in the home. Among those surveyed from Alberta, 23% reported that they have taken training in first aid some time during the three year period prior to the survey. This translates to roughly 399,000 Albertans over the age of 15 with some training and ability to administer first aid. In the national sample the corresponding estimate was slightly lower at 21%.

Almost four out of ten (39%) who were surveyed also reported that they could administer cardiopulmonary resuscitation (CPR) and this is equivalent to 688,000 Albertans with this skill. It is also noteworthy that a higher proportion of the survey population in the province had this skill when compared to the estimate for the country, which was 34%. The results also showed that 96% of Albertans agreed with the statement that it was worth learning CPR even though few people ever have to use it.

Chart 4.11.0

Respondents Owning Safety Devices for Home Use, Alberta and Canada



Health Promotion Survey, 1985

Survey participants were asked about the presence of safety equipment such as first aid kits, smoke detectors and fire extinguishers in their homes. The findings show that 72% of Albertans had first aid kits at home, an estimate almost identical to that of the country as a whole (73%). Smoke detectors were present in the homes of 82% of the survey population from the province. Only 55% of Albertans reported that they had fire extinguishers at home. Chart 4.11.0 shows that as far as the availability of such safety equipment is concerned, the provincial estimates compare favourably to those observed nationwide.

4.11.1 Demographic Factors In First Aid And Safety In The Home

Table 4.11.1(1) shows the demographic differences in the proportion of people who have had first aid training and also those with reported ability to administer C.P.R. As the findings indicate, when the overall population is considered, a slightly higher proportion of males than females reported that they had first aid training in the recent past (24% among males and 21% among females). This proportion also tends to decrease with age in the total population (male and female). It is interesting to note that a pronounced negative association between age and training in first aid was found among females in Alberta, but not among males. More importantly, almost one out of every two females (51%) in the 15-19 age group reported that they have had the training. Compared to this only 28% of male teenagers had such training.

Among Albertans of all ages, a higher proportion of males (44%) than females (34%) reported the ability to administer C.P.R. However, as in the case of training in first aid, a pronounced negative association between age and ability to administer CPR was observed among the females of this province. Among Alberta males, the proportion with reported ability to administer CPR was significantly lower among teenagers (15-19) and the elderly (60 and over) when compared to those who were 20-59 years old.

Table 4.11.1(a)

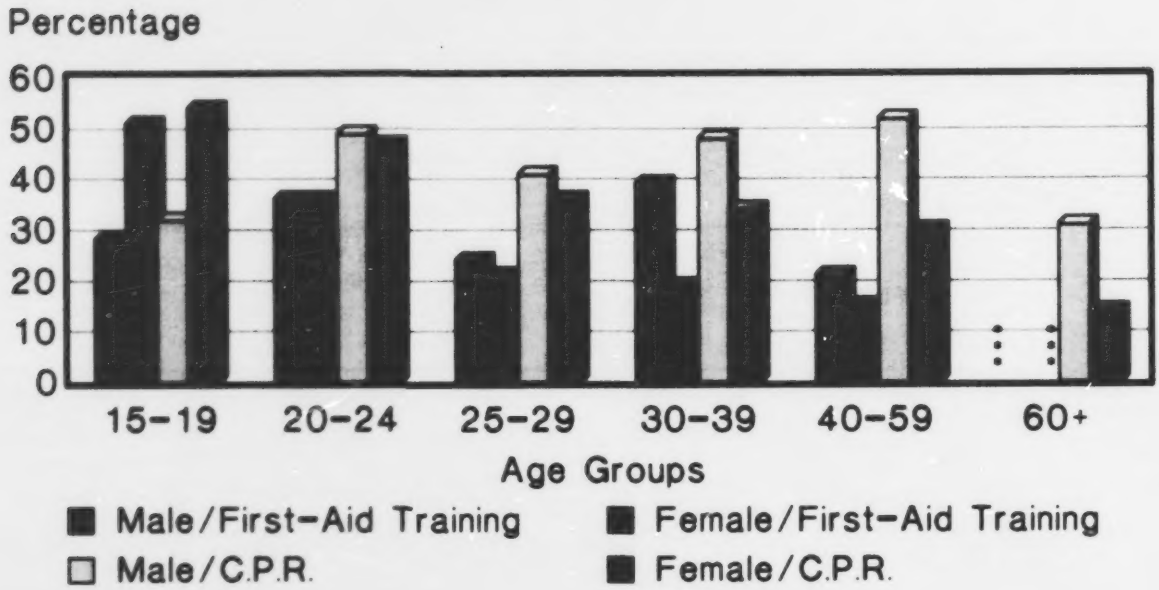
ALBERTANS WITH FIRST AID TRAINING IN THE PAST THREE YEARS AND ALBERTANS WITH REPORTED ABILITY TO ADMINISTER C.P.R., BY SEX AND AGE GROUP

(Estimated %)

Age Group	First Aid Training in the Past 3 Years (%)			Ability to Administer C.P.R. (%)		
	Male	Female	Total	Male	Female	Total
15 - 19	28	51	39	32	54	43
20 - 24	36	36	36	49	47	48
25 - 29	24	21	23	41	36	39
30 - 39	39	19	25	48	34	41
40 - 59	21	15	18	52	30	41
60+	***	***	***	31	14*	21
All Ages	24	21	23	44	34	39

Chart 4.11.1 (a)

First Aid Training and CPR Ability, Alberta By Age and Sex



Health Promotion Survey, 1985

Table 4.11.1(b) provides the results (by age groups) concerning the proportion of Albertans who live in homes with first aid kits, smoke detectors and fire extinguishers. Only 55% of young adults (aged 20-24) in Alberta reported that they have first aid kits at home. This was significantly lower than the estimates for all other age groups. It is also noteworthy that the proportion having first aid kits at home was considerably lower among the elderly in the province when compared to the middle aged group (40-59 year old) - the figures being 63% and 82% respectively.

Table 4.11.1(b)

ALBERTANS WITH FIRST AID KITS, SMOKE DETECTORS AND FIRE EXTINGUISHERS AT HOME; BY AGE GROUP

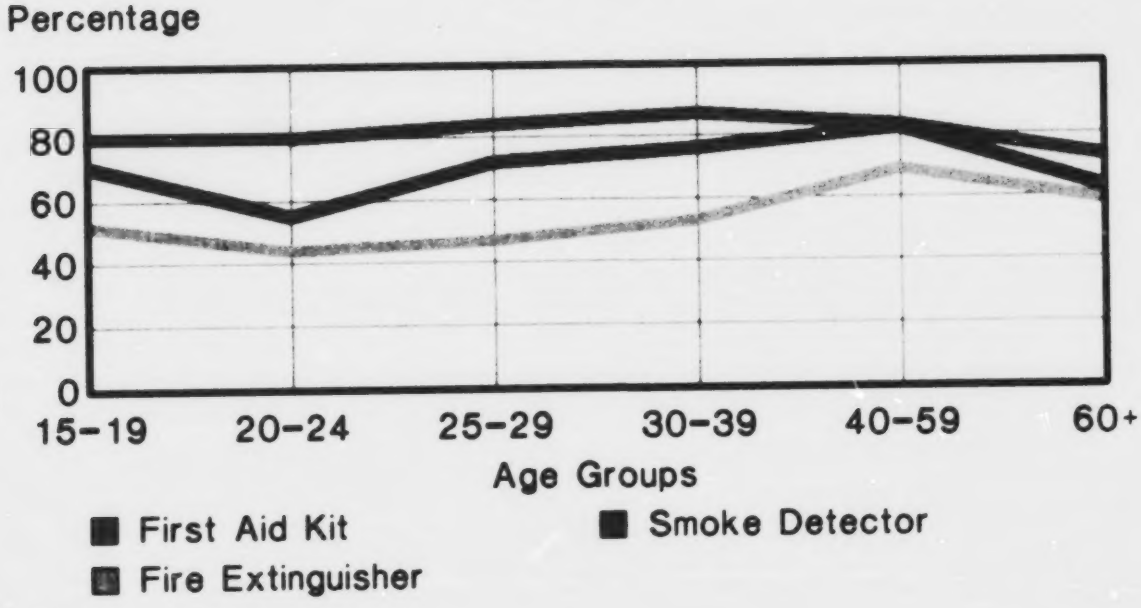
(Estimated %)

AGE GROUPS	Those Who Have First Aid Kits at Home (%)	Homes with Smoke Detectors (%)	Homes with Fire Extinguishers (%)
15 - 19	71	80	52
20 - 24	55	80	44
25 - 29	72	84	47
30 - 39	76	87	53
40 - 59	82	83	69
60+	63	73	59
All Ages	72	82	55

More important, perhaps, is the finding that the elderly Albertans were less likely to be living in homes equipped with smoke detectors when compared to younger Albertans. Thus only 73% of respondents who were 60 years or older reported the existence of smoke detectors in their homes. Corresponding figures for all other age groups were higher.

Chart 4.11.1 (b)

Albertans Reporting to Live In Homes Equipped with Safety Devices By Age



Health Promotion Survey, 1985

The results also indicate that less than one half of the 'young adults' lived in homes equipped with fire extinguishers. Corresponding estimates for the middle aged Albertans were significantly higher. In this context it is also important to note that the elderly in the province were less likely to live in homes equipped with fire extinguishers when compared to those in the 40-59 age group.

The demographic patterns in the availability of safety devices observed here could partly be accounted for by the differences in life cycle stages and concomitant variation in the quality of residential environment.

4.11.2 Education and Income In Relation to First Aid Training and CPR

The results of the survey show that the proportion of those with training in first aid increased with the level of education. As table 4.11.2 indicates, only 7% of Albertans with elementary level of education have received first aid training in the recent past. Comparative estimates for those with Community College/Some University or higher education were significantly greater (30%). A similar pattern of association between level of education and the ability to administer CPR was also observed. Moreover, such first aid related training and skills also tended to increase with the household income of respondents in the province.

The results clearly suggest that Albertans at the lowest socio-economic strata are not very well equipped to handle emergency situations involving matters of health that arise at home or in the neighbourhood.

Table 4.11.2

EDUCATIONAL LEVEL AND HOUSEHOLD INCOME IN RELATION TO FIRST AID TRAINING AND ABILITY TO ADMINISTER CPR

(Estimated %)

Socio Economic Characteristics	Those with Training in First Aid during the Previous 3 years (%)	Those with Reported Ability to Administer CPR (%)
Levels of Education		
Elementary/No Schooling	7*	23
Some Secondary/Other Education	18	36
Completed Secondary	23	39
Any Community College/ Some University	32	47
Completed University	28	47
Household Income		
Less than $20,000	16	32
$20,000 - $40,000	25	44
$40,001 - $60,000	30	41
More than $60,000	33	53

4.11.3 Concluding Comments on First Aid Safety in the Home

Almost one in five Albertans appears to have been trained in first aid in the recent past. The results also indicate that 25% of Albertans believed that they have the ability to administer CPR. The provincial estimates for both these measures compare favourably to those observed nationwide. Moreover, as far as the availability of safety equipment at home is concerned, the estimates for Alberta compared favourably to Canadian estimates.

Research carried out in the past has shown that Canada along with the United States have the highest rate of deaths from fire among the western countries[39,40]. An estimated 488 deaths from residential fires occurred in Canada in 1983[40]. The need to install an early-warning device in all residences, to alert occupants to fire, has been emphasized in previous studies[12,40].

The fact that 18% of homes in Alberta have no smoke detectors indicates that there is a potential for preventing unnecessary deaths through improvement in this area. More alarming is the finding that elderly Albertans when compared to younger Albertans were less likely to be living in homes equipped with smoke detectors.

4.12 HEALTH AND THE WORK PLACE

The workplace offers many avenues to educate Albertans on health related issues. Moreover, past studies have emphasized the fact that the work setting has many advantages in this respect. Such advantages result from regular and continuous contact, shared concerns and the existence of opportunities for reinforcement techniques to be built into health education and promotion programs and activities[12,41].

Albertans who were working at the time of the survey were asked whether their place of work was an appropriate place to promote good health habits. Almost two out of three (63%) respondents said yes. The corresponding estimate for Canada was slightly higher at 68%. Among working Albertans 53% indicated that they were aware of safety and accident prevention programs at their place of employment. This was slightly lower than the estimate of 57% for Canada as a whole.

Only four out of ten workers (40%) in Alberta were aware of other programs available at work to improve health, physical fitness and good nutrition. Among this group a good majority (76%) found the information they received

useful. The survey results also indicate that the corresponding national estimates were identical to those observed in the province. In the Alberta sample, 44% of workers have seen information about health topics at their place of work in the recent past. This was slightly lower than the estimate for Canada (46%).

Information concerning smoking restriction at the place of work was also obtained from this survey. Table 4.12.0 shows the results for Alberta and Canada. As the table shows, 10% of workers in the province indicated that there was complete restriction of smoking in their place of work; whereas the comparative estimate for Canada was only 7%. Another 39% of workers in Alberta reported restrictions in certain places at work. Overall it appears that smoking restrictions at the workplace were slightly more prevalent in the province when compared to Canada.

Table 4.12.0

SMOKING RESTRICTION AT THE WORK PLACE: ALBERTA AND CANADA

(Estimated % & Number)

Type of Smoking Restriction at the Work Place	Alberta		Canada	
	%	Estimated Number ('000s)	%	Estimated Number ('000s)
Complete Restriction	10	94	7	734
Restriction in Certain Places	39	386	40	4,228
No Restriction At All	50	495	49	5,221
Don't Know or Not Stated	1	15	4	373
Total	100	991*	100	10,556

* Rounded.

4.12.1 Demographic Factors In Health And The Workplace

Among the workers surveyed from Alberta, a slightly higher proportion of males (56%) than females (50%) reported that they were aware of accident prevention programs at their place of employment (see table 4.12.1). The results also show that working women were more likely than working men to report that they were aware of other health promotion programs available at work, the estimates being 44% and 39% respectively. Moreover, working females in Alberta were also more likely than their male counterparts to have seen health related information at their place of employment. Thus 50% of the former reported that they have seen such information when compared to 40% of the latter. Among those who have received such information, a higher proportion of women (82%) found it useful when compared to men (73%)

Complete smoking restriction at the place of work was reported by a higher proportion of women (13%) than men (7%) workers in Alberta. Smoking restriction in certain places of work was reported by 41% of women, as compared to 38% of men in the province. This result thus suggests that female workers in general were more likely, when compared to their male counterparts, to encounter smoking restrictions at work.

As the findings of the survey show, the belief that the work place was an appropriate place to promote health was held by a greater proportion of working women (71%) than working men (59%).

So far as awareness of safety or accident and other health promotion programs available at work is concerned, the results of this survey do not suggest any significant age related differences. However, the data show that the younger workers (under 30) in Alberta were less likely than the middle aged ones to have seen information about health topics at work. Moreover, the older the worker the more likely that he or she would find such information useful. As the results shown in table 4.12.1 indicate, the younger workers - when compared to the older ones - were less likely to hold the belief that the workplace was an appropriate place to promote health.

Table 4.12.1

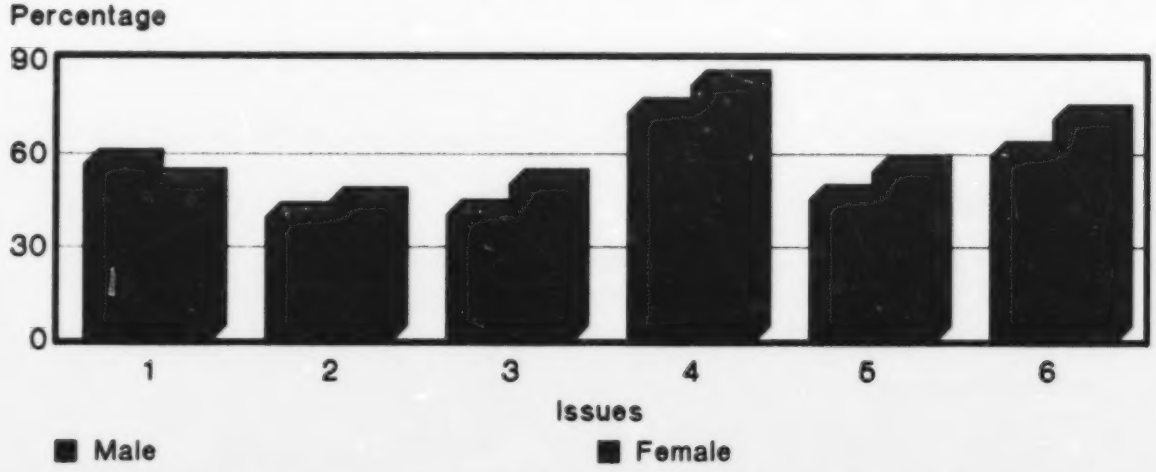
DEMOGRAPHIC FACTORS AND ISSUES RELATED TO HEALTH AND THE WORK PLACE; ALBERTA 1985

(Estimated %)

ITEM DESCRIPTION: HEALTH AND THE WORK PLACE ISSUES	All Workers (%)	Male Workers (%)	Female Workers (%)	By Age Category of Worker (%)		
				Young (30)	Middle (30-45)	Older (45+)
1. Awareness of safety or accident prevention programs at work.	54	56	50	55	55	51
2. Awareness of other health programs at work.	41	39	44	42	41	40
3. Seen information about health topics at work in the past year.	44	40	50	40	49	44
4. Those who found such health information useful.	78	73	82	74	79	81
5. Smoking restricted at work (completely or in certain places).	49	45	54	48	50	47
6. Those who believe work an appropriate place to promote health.	63	59	71	57	69	64

Chart 4.12.1

Demographic Factors and Issues Related to Health and the Work Place, Alberta 1985



1. Awareness of Safety or Accident Prevention Programs at Work
2. Awareness of Other Health Programs at Work
3. Seen Information about Health Topics at Work in the Past Year
4. Those Who Found such Health Information Useful
5. Smoking Restricted at Work (completely or in certain places)
6. Those Who Believe Work an Appropriate Place to Promote Health

Health Promotion Survey, 1985

4.12.2 Level of Education and Household Income In Relation to Health and the Workplace.

The relationships between the level of education as well as household income on the one hand, and some of the selected issues concerning health promotion in the workplace on the other, are shown in table 4.12.2. As the results clearly show, the more educated the worker, the more likely that he or she would be aware of safety or accident prevention programs available at work. Only about one in three (37%) workers in Alberta with an elementary or lower level of education reported being aware of such programs. The corresponding figure for those with completed university education was 62%. The results presented in table 4.12.2 also indicate a similar pattern of association between the level of education of the worker and each of the other dimensions of work place related health promotion issues. It is in this context particularly noteworthy that less than one half of the workers (48%) with an elementary or lower level of education believed the worksite to be an appropriate place to promote health. Compared to this more than three quarters (76%) of workers with community college/ some university or higher level of education believed that the workplace was an appropriate place to promote health.

The results shown in table 4.12.2 also indicate clearly that similar direct associations existed between household income of the worker and each of the issues related to health and the workplace that are examined here. In general the findings of the survey suggest that health promotion and protection at the workplace tend to reach and benefit workers at the upper socio-economic levels more often than those at the lower levels.

Table 4.12.2

WORKERS LEVEL OF EDUCATION AND HOUSEHOLD INCOME AND ISSUES RELATED TO HEALTH AND THE WORKPLACE: IN ALBERTA

(Estimated %)

Socio-Economic Characteristic	Issues Related To Health and The Work Place			
	Those Aware of Safety or Accident Prevention Programs At Work (%)	Those Aware of Other Health Programs (%)	Those Who Have Seen Information on Health Topics at Work (%)	Those Who Believe work Appropriate Place to Promote Health (%)
Level of Education				
1. Elementary/No School	37	) 27	29**	48*
2. Some Secondary/Other	45	)	32	59
3. Completed Secondary	53	39	39	51
4. Any Comm. College/Some University	61	52	52	76
5. Completed University	62	52	60	76
Household Income				
Less than $20,000	38	38	40	61
$20,000 - $40,000	54	38	39	60
$40,001 - $60,000	59	40	56	66
$60,000+	66	56	56	82

Chart 4.12.2 (a)

Levels of Education and Issues Related to Health and the Work Place in Alberta

- Aware of Safety/Accident Prevention Progs
- Seen Health Topics at Work
- Thought Workplace to Promote Health
- Aware of Other Health Programs
- $ Estimate for 1 and 2 Combined

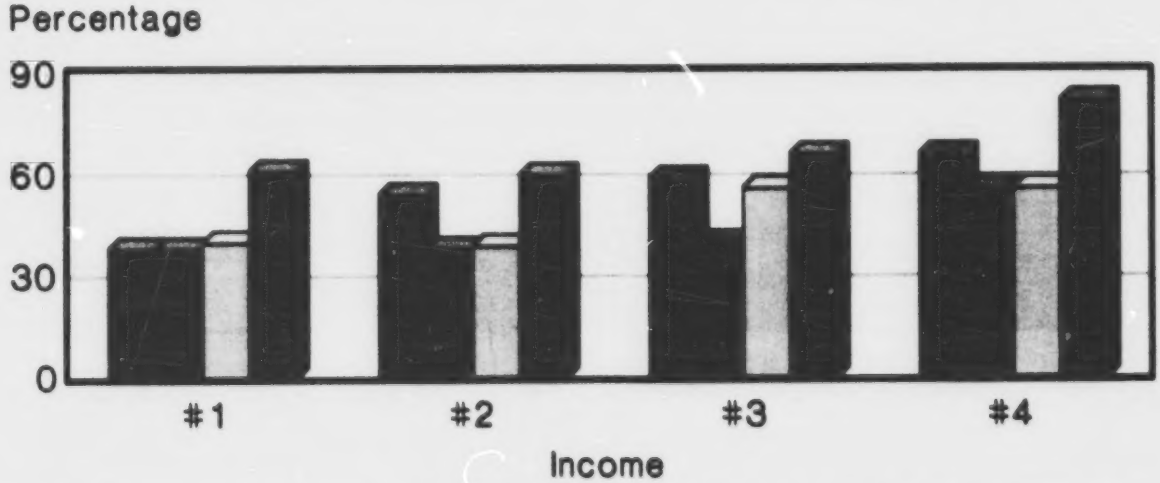
Education Groups

#1-Elementary/No School
#2-Some Sec/Other Education
#3-Complete Secondary
#4-Any Comm Coll/Some Univ
#5-Complete University

Health Promotion Survey, 1985

Chart 4.12.2 (b)

Levels of Household Income and Issues Related to Health and the Work Place in Alberta



■ Aware of Safety/Accident Prevention Progs
□ Seen Information on Health Topics
■ Aware of Other Health Programs
■ Believe Work Appropriate Place to Promote Health

#1-Less than 20,000
#2-20,000 - 40,000
#3-40,000 - 60,000
#4-60,000+

Health Promotion Survey, 1985

4.12.3 Health and The Work Place: Other Findings

The survey results show that another important factor associated with health promotion at the work site was the size of the organization or company in which a person worked. The observed relationships between the size of the organization and selected dimensions of work related health promotion are shown in table 4.12.3. It is clearly evident from the results that awareness of safety and accident prevention programs at work tends to increase as the size of the organization employing the worker increases. Similarly the larger the organization, the more likely that the employee would receive information on health topics at the workplace. The proportion of workers believing that their place of work was an appropriate arena to promote health also tended to increase as the size of the company increased. It is also noteworthy that smoking restrictions at the work place tended to increase with the size of the company employing the worker.

Table 4.12.3

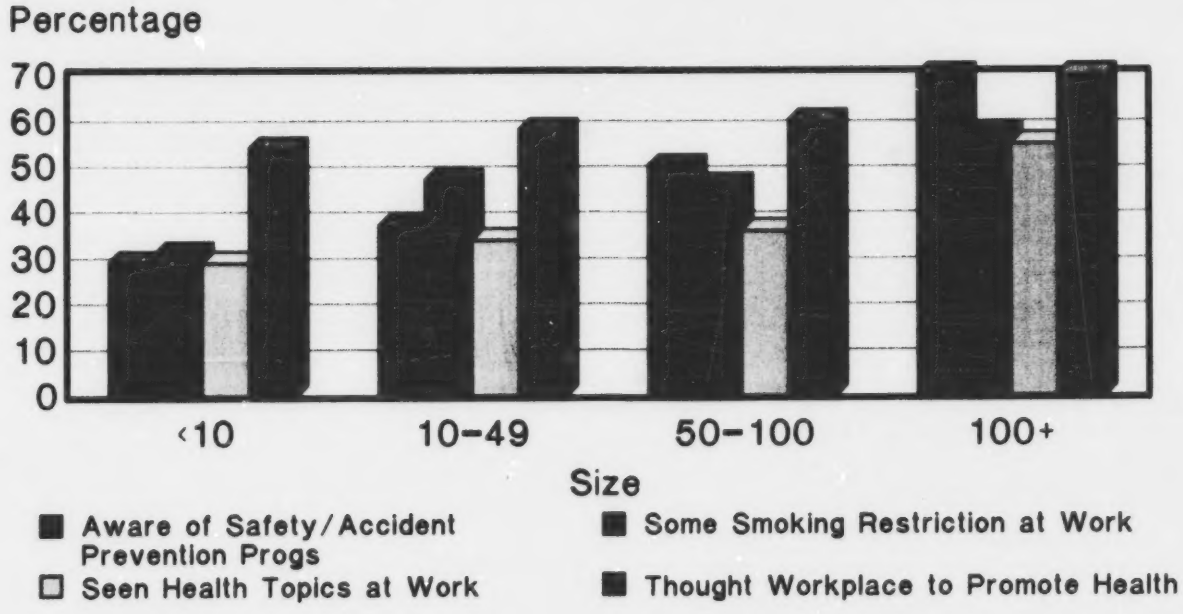
SIZE OF THE ORGANIZATION AND SELECTED ISSUES OF HEALTH PROMOTION AT THE WORKPLACE

(Estimated %)

Size (Number of Employees in the Company)	WORK RELATED HEALTH PROMOTION ISSUES			
	1. Those aware of Safety/ Accident Prevention Programs (%)	2. Those who have seen health topics at work (%)	3. Those who thought their workplace was appropriate to promote (%)	4. Some smoking restriction at Work (%)
More than 100	70	55	70	57
50 - 100	50	36	60	46
10 - 49	37	34	58	47
under 10	29	29	54	31
All Workers	54	44	63	49

Chart 4.12.3

Size of the Organization and Selected Issues of Health Promotion at the Workplace in Alberta



Health Promotion Survey, 1985

As mentioned earlier in our discussion on general health perception, Albertans were asked their opinion as to how important it was for government to deal with selected areas of health protection and promotion. Accident prevention at work was one of the ten such topics presented to respondents for their opinion.

In the survey population overall 55% thought that it was very important for government to deal with work accidents. Among the working Albertans, only 52% felt this way. The results of the survey also indicate that the corresponding estimate for workers Canada wide was higher (60%). Furthermore, the findings also indicate that a higher proportion of working women (58%), when compared to working men (50%), in Alberta thought that it was very important for government to deal with accidents at the workplace.

As table 4.12.4 indicates, the results also suggest a curvilinear association between the size of the company employing the workers and the workers' opinion concerning the role of government in this area. Thus, a higher proportion of those employed by medium sized companies (50-100 and 10-49) thought it was very important for the government to deal with the issue of work accidents, when compared to workers in large and small companies.

Table 4.12.4

SIZE OF THE ORGANIZATION AND
PROPORTION WHO FELT THAT IT WAS VERY IMPORTANT
FOR GOVERNMENT TO DEAL WITH WORK ACCIDENTS
(Estimated %)

Size of The Company	Workers Who Scored 8 or Higher on an Opinion Scale Pertaining to the Issue
More than 100	52
50 - 100	60
10 - 49	58
Under 10	48
All Workers	52

4.12.4 Concluding Comments On Health And The Workplace

A majority of workers in Alberta believed that their place of work was an appropriate arena to promote good health habits. A significant proportion of workers in the province were not aware of safety and accident prevention programs at work. A majority of workers in the province were not aware of any other types of health promotion programs. Women Workers in Alberta were more likely than their male counterparts to be aware of the availability of such programs. A large majority of those who received health related information at work found it useful.

As far as the availability of these programs is concerned, the results indicate that the provincial estimates are somewhat lower than what was observed nationwide. This suggests that there is some room for improvement in the delivery of health promotion programs designed for the workplace.

The findings also suggest that a good majority of workers at the lower end of the socio-economic strata were not aware of or have not seen health related programs at their place of work. Employees of small companies were also not adequately served through such programs available at the work place.

In general, workers in Alberta did not place a great degree of emphasis on the role of government in dealing with work accidents. It has been noted in the context that;

> "This would tend to support our 'performance-oriented' approach where government establishes general principles and objectives in its regulations, and employers and workers are expected to act responsibly in developing the specific actions and programs to achieve those principles and objectives."[42]

5. CONCLUSION

The primary aim of the preceding analysis was to determine and report the prevalence and distribution of health knowledge, beliefs, attitudes, intentions and behaviours in the adult population of Alberta. Information about the prevalence of such health related factors helps to identify issues for priority attention. Knowledge concerning the general distribution of these characteristics is useful to locate target groups for health promotion efforts.

Data Limitations:

Some of the limitations of the method and data used in this study have already been identified. In interpreting the estimates presented in this report, special attention should be given to some of the other limitations that arise as a result of the nature of questions asked and definitions used. In this context, questionnaire items and definitions relating to the following topics are noteworthy:

- Seat Belt Use - Respondents were asked "How often do you wear seatbelts when you ride in a car?". No distinction was made here between 'drivers' and 'passengers' in a car. It is therefore not clear whether the estimates derived from the survey refer to regular seatbelt use as a driver and/or as a passenger.

- Drug Use Questions used to collect data on drug use did not differentiate between 'prescription' and 'non-prescription', or 'legal' and 'illegal' types of drugs. This distinction is especially important when referring to "pep pills" and stimulants. Given the nature of this question it was not possible to determine the prevalence of 'legal' and 'illegal' use of 'pep pills' and 'stimulants'. Moreover, the terms 'pep pills' and 'stimulants' also lack specificity.

- Exercise - Estimates of regular exercise in the population are strongly influenced by the definition used. Because the definition used in this

survey specifies vigorous activity for a minimum duration of 15 minutes, the regular exercisers likely received some health benefits. However, the exercise intensity required for cardiovascular health benefit is higher than reflected in the definition of 'regular exercise' used in this report[44,45].

It should also be noted here that the survey question (Q23) did not distinguish between "work exercise" and "non work exercise". It is therefore possible that work related activities such as "brisk walking" were interpreted as exercise by some respondents. Since the survey did not necessarily exclude brisk walking and other such activities carried out during work, in some instances (for example farmers) the estimate of those who 'exercise' regularly may be lower than the estimate provided in this report.

- Hypertension - There might be a subset of the population whose blood pressure was under control by artificial means who did not respond to the question on means by which they controlled their blood pressure because they responded negatively to the question about whether their blood pressure was high. The figures presented in this context may therefore underestimate or slightly misrepresent the number of those who did something to control their high blood pressure and may be confounded by whether or not the methods used were effective in controlling hypertension. Hence, the estimates in this area should be interpreted with caution.

- Breast Self Examination - The survey results showed that a large proportion of women in Alberta (77%) reported that they have been shown how to examine their own breasts. Due to the lack of specificity in the question, it is not clear whether the instruction came from health professionals, mass media, friends or relatives. Thus the quality of personal instruction on how to perform BSE could vary and be open to question.

- Nutrition: In the question (7a) concerning the role of government in dealing with health topics, the term "eating habits" was used. This

does not have the impact of "obesity" or even nutrition. As such the rating given to this topic may not give a true picture of the concern of the public regarding nutrition and the role of government in this area.

Considering the comprehensiveness of issues covered in this telephone survey, it should be emphasized here that the methodological and data limitations of the study were relatively minor. Most of the estimates on prevalence and distribution of health related attitudes and behaviours in Alberta provide for the first time a baseline of information for further planning research and monitoring.

Further Analysis and Technical Reports

This report presented only a general overview of Alberta results compared to Canadian results as a whole. The findings were presented within a broad socio-demographic framework. Given the complexity and diversity of topics included in HPS, further analysis may be warranted to prepare technical reports on some of the special areas covered in the study. These areas could include nutrition, the elderly, youth, women's health and other topics as deemed appropriate.

It should also be noted here that Health and Welfare Canada will be finalizing a number of technical reports, based on this survey, to be published by March 1987. Review of such reports by professionals in various areas of health education and promotion would be essential to identify the need for technical reports dealing with areas relevant to Alberta. The findings of this report along with such reviews would also assist in developing appropriate conceptual frameworks for such special reports dealing with provincial issues.

Relation to Other Studies and Future Health Promotion Surveys

In recent years, there have been a number of surveys in Canada concerning some of the matters dealt with in the national HPS. The major ones are: the

Canada Health Survey, the General Social Survey, the Canada Fitness Survey, the Canada Labour Force Survey on Smoking, the Canada Student Health Survey and local Risk Factor Surveys. The HPS has a systematic relationship to all these surveys, yet encompasses several important areas that have not been included in previous studies.

Examples of local health surveys recently carried out in the province include the Edmonton Survey[12] and Alberta Risk Factor Surveys of four health units. Taken together these studies will provide a growing set of health promotion data base at the federal, provincial and local levels. Furthermore, as pointed out earlier, it is planned that the HPS will be repeated in approximately three years to evaluate federal health promotion programs initiated in different regions. Such future studies would also help in the continued monitoring of various attitudes, beliefs and behaviours of Albertans in the realm of health education and promotion.

APPENDIX I-a

(SELECTION CONTROL FORM)

Statistics Canada Statistique Canada

MS - 1

Confidential when completed

1: ⌊⌊⌋⌊⌋⌊⌋⌊⌋⌊⌋⌊⌋ 2. ⌊⌋
3. ⌊⌋

SELECTION — CONTROL FORM

RECORD OF CALLS

10	11 Date		12 Start		13 Finish		14 Result	15 Interviewer's Name	16 Comments
	Day	Month	Hr	Min	Hr	Min			
01									
02									
03									
04									
05									
06									
07									
08									
09								—	
10									
11									
12									
13									
14									
15									

20. Hello. I'm _____ from Statistics Canada. We are doing a survey on the knowledge and attitudes of Canadians about important health issues.

21. I'd like to confirm that I've dialed the right number. Is this _____ (read number)?

- ○ Yes
- ○ No → *Dial again. If still wrong, END*

22. Is this number for a business, an institution or a private home?

- ○ Private home
- ○ Both home and business/institution

} Go to 30

- ○ Business, institution or other non-residence (Specify) (Name of business/institution)

_____

_____

23. Does anyone use this telephone number as a home phone number?

- ○ Yes
- ○ No → *Thank respondent and END*

24. How many persons live or stay at this address?

- ○ Less than 15 → Go to 30
- ○ 15 or more → Complete form MS - 1A

8-8400-141 3-82

30 This survey is being conducted by Statistics Canada for the Department of Health and Welfare to study health habits of Canadians and their attitudes towards current health programs. This is a voluntary survey and all information provided will be kept confidential as guaranteed by the Statistics Act. In order to ensure that we have a good cross-section of people for this survey, I will need to get some information about all persons living here to determine whom to interview.

31. What is the first name of each person now living or staying at this address who has no usual place of residence elsewhere? Let's start with the oldest person in the household.

Enter names in 42

32 Are there any persons away from this household attending school, visiting, travelling or in the hospital who USUALLY live here?

○Yes → *Enter names in 42*

○No

33 Does anyone else live at this address, such as other relatives, roomers, boarders or employees?

○Yes → *Enter names in 42*

○No

34. INTERVIEWER
- *Enter answers for 43 through 48 for each person recorded in 42*
- *Then go to 50*

40	41	42 Names of household members	43 SEL #	44 AGE	45 SEX	46	47	48	49
	1	Given Name / Surname		—					
	2	Given Name / Surname							
	3	Given Name / Surname							
	4	Given Name / Surname							
	5	Given Name / Surname							
	6	Given Name / Surname							
	7	Given Name / Surname							
	8	Given Name / Surname							

50 Now I'm going to use a selection procedure to determine whom to interview. This will just take a second.

51 INTERVIEWER
- *In 43, number the persons 15 years of age and over in order from oldest to youngest*
- *Determine the selected person by referring to the Selection Grid below*
- *In item 43, circle the number of the selected person*

52 The person I am to interview is (read name). Is he/she there?

○Yes → Complete survey questionnaire

○No → Set up appointment

53 Best time to contact selected person

60. Final Status

61. Interviewer Number

63 Notes

Item No

Selection Grid Label

A = Household Size B = Select #

APPENDIX I-b

(HPS SURVEY QUESTIONNAIRE)

Statistics Canada Statistique Canada

HEALTH PROMOTION SURVEY

Telephone Number | Household Page Line No

First I would like to ask you a few questions about your health.

1. In general, compared to other persons your age would you say your health is ...

   1 ○ Excellent
   2 ○ Very good
   3 ○ Good
   4 ○ Fair
   5 ○ Poor

2. Do you agree or disagree with the following statement? Compared to most people my age I make more of an effort to improve my health.

   6 ○ Agree
   7 ○ Disagree
   8 ○ No opinion

3. Do you think there is anything you personally should do to improve your physical health?

   1 ○ Yes 2 ○ No ——→ Go to 6

4. What is the most important thing you personally should do?

   3 ○ Exercise more
   4 ○ Improve eating habits
   5 ○ Lose weight
   6 ○ Stop smoking
   7 ○ Reduce drug use/medications
   8 ○ Cut down on drinking
   9 ○ Other (specify) _____

5. Is there anything stopping you from making this improvement? (Mark all that apply)

   01 ○ No
   02 ○ Problem not serious, no urgency
   03 ○ Lack of time
   04 ○ Lack of self discipline, energy
   05 ○ Too depressed
   06 ○ Don't know how to get started, lack knowledge
   07 ○ Peer pressure
   08 ○ Lack of support from family or friends
   09 ○ Don't want to change current habits
   10 ○ Too difficult
   11 ○ Too costly
   12 ○ Other (specify) _____

6. Do you think there is anything you personally should do to improve the way you cope with stress?

   1 ○ Yes 2 ○ No ——→ Go to 9

7. What is the most important thing you think you should do? (Mark only most important)

   1 ○ Exercise more
   2 ○ Learn to relax, worry less
   3 ○ Get out more often, make new friends, socialize
   4 ○ Change jobs, move, leave home, change situation
   5 ○ Reduce drug use/medications
   6 ○ Reduce alcohol use
   7 ○ Spend more time with family and close friends
   8 ○ Other (specify) _____

8. Is there anything stopping you from making this improvement?

   01 ○ No
   02 ○ Problem not serious, no urgency
   03 ○ Lack of time
   04 ○ Lack of self discipline, energy
   05 ○ Too depressed
   06 ○ Don't know how to get started, lack knowledge
   07 ○ Peer pressure
   08 ○ Lack of support from family or friends
   09 ○ Don't want to change current habits
   10 ○ Too difficult
   11 ○ Too costly
   12 ○ Other (specify) _____

9. In general would you say you're ...

   1 ○ Very happy
   2 ○ Pretty happy
   3 ○ Not too happy

10. Would you describe your life as ...

    4 ○ Very stressful
    5 ○ Fairly stressful
    6 ○ Not very stressful
    7 ○ Not at all stressful

B 5400 10C 1 2-4-85 18/CT REG 814069 2G

11. Are there health topics about which you feel you need more information?

[8] Yes [9] No ——→ Go to 13

12. On which of the following health topics do you feel you need more information?

	Yes	No
Nutrition	01	02
High blood pressure	03	04
Mental health	05	06
Smoking	07	08
Alcohol	09	10
Marijuana	11	12
Safety and accident prevention	13	14

The next few questions are about your current physical condition.

13. How tall are you without shoes?

[1] [ ][ ] feet / inches or [2] [ ][ ][ ] centimetres

14. How much do you weigh?

[3] [ ][ ][ ] pounds or [4] [ ][ ][ ] kilograms

15. How much would you like to weigh?

[5] [ ][ ][ ] pounds or [6] [ ][ ][ ] kilograms

[7] Don't know

16. Are you limited in the kind or amount of activity you can do because of a long term physical condition or health problem? By long term I mean a condition that has lasted or is expected to last more than 6 months.

[1] Yes [2] No ——→ Go to 18

17. Are your activities limited ...

	Yes	No
At home	3	4
At work or school	5	6
In other activities such as leisure time pursuits or transportation to or from work	7	8

18. When did you last have your blood pressure checked?

[1] Last 6 months
[2] 6-12 months
[3] One to two years
[4] More than 2 years
[5] Never
[6] Don't know } Go to 22

19. As far as you know is your blood pressure high?

[7] Yes
[8] No
[9] Don't know } Go to 22

20. Are you currently doing anything to control your blood pressure?

[1] Yes [2] No ——→ Go to 22

21. What are you doing? (Mark all that apply)

[01] Medication
[02] Quit smoking
[03] Exercise
[04] Weight loss
[05] Sodium restriction
[06] Other diet change
[07] Relaxation
[08] Reduce alcohol use
[09] Other (specify) _____
[10] Don't know

22. Do you agree or disagree with the following statement? You only need to have your blood pressure checked if you think you have a problem.

[1] Agree
[2] Disagree
[3] No opinion

The next few questions are about exercise.

23. Exercise includes vigorous activities such as callisthenics, jogging, racquet sports, team sports, dance classes, or brisk walking. Do you feel you get as much exercise as you need or less than you need?

[4] As much as needed
[5] Less than needed
[6] Don't know

24. How many times per week do you exercise for at least 15 minutes?

[1] Daily
[2] 5-6 times a week
[3] 3-4 times a week
[4] 1-2 times a week
[5] Less than once a week
[6] Never
[7] Don't know

25. Would you say you are physically more active, about the same or less active than other persons your age?

[1] More active
[2] About the same
[3] Less active
[4] Don't know

26. Do you think that getting more exercise would improve your health...

[6] A great deal
[7] A moderate amount
[8] A little
[9] Not at all
[0] Don't know

The next few questions are about smoking.

27. At the present time do you smoke cigarettes?

[1] Yes [2] No ⟶ Go to 31

28. Do you smoke cigarettes regularly, that is usually everyday or occasionally, not every day?

[3] Regularly [4] Occasionally

29. In the past year has anyone asked you to not smoke around them?

[5] Yes [6] No ⟶ Go to 31

30. Where has this happened? Anywhere else? (Mark all that apply)

[1] At school
[2] At work
[3] In a car
[4] Restaurant
[5] In your own home
[6] In a house other than your own
[7] Other (specify) _____

31. Now I'd like your opinion on some statements about smoking. Tell me whether you agree or disagree with each of the following?

	Agree	Disagree	No opinion
Children are more likely to start smoking if their parents smoke	[01]	[02]	[03]
People are too concerned about the effect on their health of other people smoking	[04]	[05]	[06]
Most non-smokers don't mind when people smoke in their presence	[07]	[08]	[09]
Women should not smoke during pregnancy	[10]	[11]	[12]
Non-smokers should be provided with a smoke-free area where they work	[13]	[14]	[15]
Smokers should ask permission before smoking in the presence of others	[16]	[17]	[18]
Smoking helps you stay slim	[19]	[20]	[21]

32. Do you think that a person who quits after ten years of heavy smoking reduces the risk of getting a disease related to smoking...

[1] A great deal
[2] A moderate amount
[3] A little bit
[4] Not at all
[5] Don't know

33. Do you ever feel unpleasant effects from the cigarette smoke of others?

[6] Yes [7] No

34. Have you ever asked someone not to smoke?

[8] Yes [9] No ⟶ Go to 36

35. Where was that? Anywhere else? (Mark all that apply)

[1] In restaurant
[2] At work
[3] At school
[4] In a car
[5] Public transportation (bus, airplane)
[6] In your own home
[7] In a house other than your own
[8] Other (specify) _____

Now I would like to ask some questions about alcohol consumption.

36. In the next questions when we use the word drink it means:

One bottle of beer or glass of draft
One small glass of wine
One shot or mixed drink with hard liquor

Have you ever taken a drink of beer, wine, liquor or other alcoholic beverage?

[1] Yes [2] No ⟶ Go to 44

37. In the past 12 months, have you taken a drink of beer, wine, liquor or other alcoholic beverage?

[3] Yes [4] No ⟶ Go to 44

38. During the past 12 months, how often, on average, did you drink alcoholic beverages? Was it...

[1] Every day
[2] 4-6 times a week
[3] 2-3 times a week
[4] Once a week
[5] Once or twice a month
[6] Less often than once a month

39. (a) Thinking back over the past 7 days, on how many of these days did you have any alcoholic drinks?

☐ 88 ○ None ——→ Go to 40

(b) On how many of these days did you have 3 or more drinks?

☐ 88 ○ None ——→ Go to 40

(c) On how many of these days did you have 4 or more drinks?

☐ 88 ○ None ——→ Go to 40

(d) On how many of these days did you have 8 or more drinks?

☐ 88 ○ None ——→ Go to 40

(e) On how many of these days did you have 12 or more drinks?

☐ 88 ○ None

40. Would you say that this is more, less or about the same amount that you usually consume during a week?

1 ○ More
2 ○ Less
3 ○ Same

41. During the past month how many times have you driven within two hours after drinking any amount of alcohol?

☐,☐

88 ○ Don't drive ——→ Go to 44
99 ○ Don't know

42. About how many drinks can you have, over a 3 hour period, before you would worry about your ability to drive?

☐,☐

99 ○ Don't know

43. There is a legal limit to the amount of alcohol you can have in your blood when driving. How many drinks do you think you can have over a period of three hours before you are over the legal limit?

☐,☐

99 ○ Don't know

44. In the past 12 months, have you been with a friend or relative whom you thought had too much to drink to drive safely?

5 ○ Yes
6 ○ No
7 ○ Don't know } Go to 47

45. On the most recent occasion did you attempt to prevent this person from driving?

5 ○ Yes 6 ○ No ——→ Go to 47

46. What did you do? (Mark all that apply)

1 ○ Drove them home yourself
2 ○ Asked someone to drive them home
3 ○ Asked them to take a taxi
4 ○ Hid their car keys
5 ○ Served coffee
6 ○ Kept the person at your home
7 ○ Other (specify) _____

47. How many drinks do you think a person can have per week, without endangering his her health over the long term?

☐,☐

99 ○ Don't know

48. Now I'd like your opinion on some statements about drinking. Please tell me, whether you agree or disagree?

	Agree	Dis agree	No opinion
Moderate drinking can be good for your health	01 ○	02 ○	03 ○
On social occasions I often feel obligated to have a drink, even when I would rather not	04 ○	05 ○	06 ○
Most drinkers do not suffer health problems as a result of their drinking	07 ○	08 ○	09 ○
Most people don't mind if you get intoxicated once in a while	10 ○	11 ○	12 ○
I'd rather pay for a taxi than see a friend drive after drinking	13 ○	14 ○	15 ○

Now I would like to ask about your use of drugs.

49. In the past 12 months have you used:

Sleeping pills?	01 ○	Yes
	02 ○	No
Pep pills, stimulants?	03 ○	Yes
	04 ○	No
Tranquilizers such as valium?	05 ○	Yes
	06 ○	No
Cocaine?	07 ○	Yes
	08 ○	No
Marijuana or hashish?	09 ○	Yes
	10 ○	No

50. Do you think that occasional use of marijuana will affect a persons' physical or mental health?

4 ○ Yes
5 ○ No
6 ○ Don't know } Go to 52

81. What effects do you think it would have? (Mark all that apply)

01 ○ Relaxation or other positive effects
02 ○ Addiction/leads to harder drugs
03 ○ Memory loss, brain damage
04 ○ Other mental or behavioral effects
05 ○ Lung damage
06 ○ Genetic problems/sterility
07 ○ Other physical health problems
08 ○ Increase/risk of accidents or injury
09 ○ Other (specify) _____
10 ○ Don't know

The next few questions are about safety.

82. On average, about how many miles or kilometres per week do you travel in a private vehicle ...

As a driver?

1 [ ][ ][ ][ ] miles or 2 [ ][ ][ ][ ] kilometres

3 ○ Don't know

83. On average, about how many miles or kilometres per week do you travel in a private vehicle ...

As a passenger?

4 [ ][ ][ ][ ] miles or 5 [ ][ ][ ][ ] kilometres

6 ○ Don't know

84. How often do you use seatbelts when you ride in a car? (Read responses)

1 ○ Always
2 ○ Most of the time
3 ○ Sometimes
4 ○ Rarely or never

85. When you are driving a car do you insist that the children with you have their seatbelt fastened or are in carseats? (Read responses)

1 ○ Always
2 ○ Most of the time
3 ○ Sometimes
4 ○ Rarely or never
5 ○ Don't drive
6 ○ Don't drive with children in car

86. In the past 3 years have you taken any training to administer first aid?

7 ○ Yes 8 ○ No

87. Can you administer cardio-pulmonary resuscitation, sometimes called CPR?

1 ○ Yes 2 ○ No

88. Would you agree or disagree with the following statement? It is worth learning CPR even though few people ever have to use it.

3 ○ Agree
4 ○ Disagree
5 ○ No opinion

89. Do you have the following in your home?

	Yes	No
A first aid kit	1 ○	3 ○
A smoke detector	3 ○	4 ○
A fire extinguisher	5 ○	6 ○

90. Interviewer check item

Respondent is Female 7 ○ → Go to 91
Male 8 ○ → Go to 95

The next questions are about health practices.

91. In the past 12 months have you had your breasts examined by a doctor or nurse?

1 ○ Yes 2 ○ No

92. Have you ever been shown how to examine your breasts?

3 ○ Yes 4 ○ No

93. How often do you examine your own breasts? Would you say ...

5 ○ At least once a month
6 ○ Once every 2-3 months
7 ○ Less often
8 ○ Never

94. How often do you think a woman should examine her own breasts?

1 ○ At least once a month
2 ○ Once every 2-3 months
3 ○ Less often
4 ○ Never
5 ○ Don't know

95. When was the last time you had a PAP smear test for cancer?

1 ○ Within the past year
2 ○ Last 2-3 years
3 ○ More than 3 years
4 ○ Never
5 ○ Don't know

The next few questions are about social relationships.

66. About how many people, including relatives, do you consider to be your friends, that is, people you see socially on a regular basis?

☐☐

67. Of the people you see socially how many smoke cigarettes? (Read responses)

1○ None
2○ A few
3○ About half
4○ Most or all
5○ Don't know

68. How many would you say drink too much? (Read responses)

1○ None
2○ A few
3○ About half
4○ Most or all
5○ Don't know

69. How many of your friends use marijuana regularly? (Read responses)

1○ None
2○ A few
3○ About half
4○ Most or all
5○ Don't know

70. How many of your friends exercise regularly? (Read responses)

1○ None
2○ A few
3○ About half
4○ Most or all
5○ Don't know

71. How many do you consider to be your close friends, that is, people you could talk to if you needed help or had a problem? (Read responses)

1○ None
2○ A few
3○ About half
4○ Most or all
5○ Don't know

72. What is your current marital status?

1○ Married (including common-law)
2○ Single/never married
3○ Separated
4○ Divorced
5○ Widowed

→ Go to 74

73. Does your spouse do any of the following?

	Yes	No
Exercise regularly	01○	02○
Smoke cigarettes	03○	04○
Drink too much	05○	06○
Overeat	07○	08○
Use tranquillizers such as valium	09○	10○
Smoke marijuana	11○	12○

The next questions are about nutrition.

74. In the last week or how many days did you have the following for breakfast?

— Nothing or just coffee or tea ☐
Eggs, bacon, ham or other meat ☐
Breads, pastries, pancakes or cereals ☐
Fruit or juice ☐
Cheese, milk or other dairy products ☐

75. Are there any foods which you think you should limit or avoid, for the sake of your health?

1○ Yes 2○ No → Go to 77

76. Of the following types of food, which one do you feel is the most important to limit or avoid for the sake of your health? Food that is . . .

3○ High in cholesterol
4○ High in fat
5○ High in sugar
6○ High in salt
7○ Don't know

77. Are there any foods which you think you should eat more often for the sake of your health?

8○ Yes 9○ No → Go to 79

78. Of the following types of food, which one do you feel is the most important to eat more often for the sake of your health? Foods such as . . .

1○ Fruits and vegetables
2○ Whole grain cereals
3○ Milk and milk products
4○ Meat/fish/poultry
5○ Don't know

79. I will now read a list of health topics. For each one I'd like your opinion about how important you feel it is for the government to deal with each topic. Tell me on a scale from 1 to 10, with 1 being not at all important and 10 being extremely important.

	Not at all important 1	2	3	4	5	6	7	8	9	*Extremely important* 10	*Don't know*
Drug use	01	02	03	04	05	06	07	08	09	10	11
Smoking	12	13	14	15	16	17	18	19	20	21	22
Alcohol problems	23	24	25	26	27	28	29	30	31	32	33
High blood pressure	34	35	36	37	38	39	40	41	42	43	44
Child health	45	46	47	48	49	50	51	52	53	54	55
Eating habits	56	57	58	59	60	61	62	63	64	65	66
Mental health	67	68	69	70	71	72	73	74	75	76	77
Accident prevention in the home	78	79	80	81	82	83	84	85	86	87	88
Accident prevention at work	89	90	91	92	93	94	95	96	97	98	99
Accident prevention on the road	100	101	102	103	104	105	106	107	108	109	110

80. Do you agree or disagree with the following statements?

	Agree	Disagree	No opinion
Following a healthy diet is expensive and time consuming	1	2	3
I'd rather be overweight than have to give up many of the foods I like	4	5	6
Skipping breakfast is an effective way to control or reduce your weight	7	8	9

81. Do you think that you could improve your health by changing your eating habits?

1 Yes
2 No
3 Don't know

Finally a few questions about yourself.

82. What is the highest grade or level of education you have ever completed?

1 No schooling
2 Elementary
3 Some } Secondary
4 Completed }
5 Some } Community college, technical college, CEGEP, nurse's training
6 Completed }
7 Some } University or teacher's college
8 Completed }
9 Other education or training

83. What language do you speak at home most often?

1 English
2 French
3 Other

84. What is the postal code for this dwelling?

[ ][ ][ ] [ ][ ][ ] 4 Don't know

85. How many telephones, counting extensions, are there in your dwelling?

1 One ——→ Go to 90
2 Two or more

86. Do all the telephones have the same number?

3 No
4 Yes ——→ Go to 90

87. How many different numbers are there?

[ ][ ]

88. Are any of these numbers for business use only?

5 No ——→ Go to 90
6 Yes

89. How many are for business use only?

[ ][ ]

90. Which of the following best describes your main activity during the last 12 months? Were you mainly...

[1] ○ Working at a job or business → Go to 92

[2] ○ Looking for work → Go to 91

[3] ○ A student
[4] ○ Retired
[5] ○ Keeping house
[6] ○ Other (specify) _____
→ Go to 96

91. Did you have a job at any time during the last 12 months?

[1] ○ Yes [2] ○ No → Go to 96

92. For whom do/did you work?

[ ][ ][ ][

107. Aside from improving your health, was there any other reason that you decided to do this?

[1] ○ Yes

[2] ○ No ——→ Go to 109

108. What was the other reason?

109. Considering the health topics we've discussed in this questionnaire, is there anything you intend to do, to improve your health in the next year? (Mark all that apply)

[01] ○ Nothing
[02] ○ Increase exercise
[03] ○ Lose weight
[04] ○ Improve eating habits
[05] ○ Quit smoking/reduce amount smoked
[06] ○ Reduce drug/medication use
[07] ○ Drink less alcohol
[08] ○ Have blood pressure checked
[09] ○ Attempt to control blood pressure
[10] ○ Learn to manage stress
[11] ○ Reduce stress level
[12] ○ Receive medical treatment
[13] ○ Other (specify) _____

COMMENTS:

APPENDIX II

(CO-EFFICIENT OF VARIABILITY TABLE: CRUDE ESTIMATES)

CRUDE SAMPLING VARIABILITY TABLES FOR THE HEALTH PROMOTION SURVEY

ALBERTA

NUMERATOR OF PERCENTAGE (*1000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	91.4	91.0	90.6	89.2	86.8	84.3	81.8	79.2	76.5	73.8	70.9	64.7	50.1	28.9
2	********	64.4	64.0	63.0	61.4	59.6	57.9	56.0	54.1	52.1	50.1	45.7	35.4	20.5
3	********	52.5	52.3	51.5	50.1	48.7	47.2	45.7	44.2	42.6	40.9	37.3	28.9	16.7
4	********	45.5	45.3	44.6	43.4	42.2	40.9	39.6	38.3	36.9	35.4	32.3	25.1	14.5
5	********	40.7	40.5	39.9	38.8	37.7	36.6	35.4	34.2	33.0	31.7	28.9	22.4	12.9
6	********	37.2	37.0	36.4	35.4	34.4	33.4	32.3	31.2	30.1	28.9	26.4	20.5	11.8
7	********	34.4	34.2	33.7	32.8	31.9	30.9	29.9	28.9	27.9	26.8	24.4	18.9	10.9
8	********	32.2	32.0	31.5	30.7	29.8	28.9	28.0	27.1	26.1	25.1	22.9	17.7	10.2
9	********	30.3	30.2	29.7	28.9	28.1	27.3	26.4	25.5	24.6	23.6	21.6	16.7	9.6
10	********	28.8	28.6	28.2	27.4	26.7	25.9	25.1	24.2	23.3	22.4	20.5	15.8	9.1
11	********	27.4	27.3	26.9	26.2	25.4	24.7	23.9	23.1	22.2	21.4	19.5	15.1	8.7
12	********	26.3	26.1	25.7	25.1	24.3	23.6	22.9	22.1	21.3	20.5	18.7	14.5	8.4
13	********	25.2	25.1	24.7	24.1	23.4	22.7	22.0	21.2	20.5	19.7	17.9	13.9	8.0
14	********	24.3	24.2	23.8	23.2	22.5	21.9	21.2	20.5	19.7	18.9	17.3	13.4	7.7
15	********	23.5	23.4	23.0	22.4	21.8	21.1	20.5	19.8	19.0	18.3	16.7	12.9	7.5
16	********	22.8	22.6	22.3	21.7	21.1	20.5	19.8	19.1	18.4	17.7	16.2	12.5	7.2
17	********	22.1	22.0	21.6	21.0	20.5	19.8	19.2	18.6	17.9	17.2	15.7	12.2	7.0
18	**********	21.5	21.3	21.0	20.5	19.9	19.3	18.7	18.0	17.4	16.7	15.2	11.8	6.8
19	**********	20.9	20.8	20.5	19.9	19.3	18.8	18.2	17.6	16.9	16.3	14.8	11.5	6.6
20	**********	20.4	20.3	19.9	19.4	18.9	18.3	17.7	17.1	16.5	15.8	14.5	11.2	6.5
21	**********	19.9	19.8	19.5	18.9	18.4	17.9	17.3	16.7	16.1	15.5	14.1	10.9	6.3
22	**********	19.4	19.3	19.0	18.5	18.0	17.4	16.9	16.3	15.7	15.1	13.8	10.7	6.2
23	**********	18.9	18.8	18.5	18.1	17.6	17.1	16.5	16.0	15.4	14.8	13.5	10.4	6.0
24	**********	18.5	18.4	18.1	17.7	17.2	16.7	16.1	15.6	15.1	14.5	13.2	10.2	5.9
25	**********	18.1	17.8	17.4	16.9	16.4	15.8	15.3	14.8	14.2	13.9	12.9	10.0	5.8
30	**********	16.5	16.3	15.9	15.4	14.9	14.5	14.0	13.5	12.9	12.5	11.8	9.1	5.3
35	**********	15.3	15.1	14.7	14.3	13.8	13.4	12.9	12.5	12.0	11.5	10.9	8.5	4.9
40	**********	14.1	13.7	13.3	12.9	12.5	12.1	11.7	11.2	10.8	10.3	9.8	7.9	4.6
45	**********	13.3	12.9	12.6	12.2	11.8	11.4	11.0	10.6	10.1	9.6	9.1	7.5	4.3
50	**********	12.6	12.3	11.9	11.6	11.2	10.8	10.4	10.0	9.6	9.1	8.6	7.1	4.1
55	**********	12.0	11.7	11.4	11.0	10.7	10.3	9.9	9.5	9.1	8.7	8.2	6.8	3.9
60	**********	11.5	11.2	10.9	10.6	10.2	9.9	9.5	9.1	8.8	8.4	7.8	6.5	3.7
65	**********	11.1	10.8	10.5	10.1	9.8	9.5	9.1	8.8	8.5	8.0	7.5	6.2	3.6
70	**********	10.7	10.4	10.1	9.8	9.5	9.1	8.8	8.5	8.2	7.7	7.2	6.0	3.5
75	**********	10.3	10.0	9.7	9.4	9.1	8.8	8.5	8.2	7.9	7.5	6.9	5.8	3.3
80	**********	10.0	9.7	9.4	9.1	8.9	8.6	8.3	8.0	7.7	7.2	6.7	5.6	3.2
85	**********	9.7	9.4	9.1	8.9	8.6	8.4	8.1	7.8	7.5	7.0	6.5	5.4	3.1
90	**********	9.1	8.9	8.6	8.4	8.2	7.9	7.6	7.3	7.0	6.6	6.2	5.1	3.0
95	**********	8.9	8.7	8.4	8.2	7.9	7.7	7.4	7.1	6.8	6.5	6.0	5.0	2.9
100	**********	8.7	8.4	8.2	7.9	7.7	7.4	7.1	6.8	6.6	6.3	5.8	4.8	2.8
125	**********	7.8	7.5	7.3	7.1	6.8	6.6	6.3	6.0	5.8	5.5	5.0	4.1	2.4
150	**********	7.1	6.9	6.7	6.5	6.2	6.0	5.8	5.5	5.3	5.0	4.6	3.7	2.2
200	**********	6.0	5.8	5.6	5.4	5.2	5.0	4.8	4.7	4.5	4.3	3.9	3.2	1.9
250	**********	5.3	5.2	5.0	4.8	4.7	4.5	4.3	4.2	4.0	3.8	3.5	2.8	1.7
300	**********	4.7	4.6	4.4	4.3	4.1	4.0	3.8	3.7	3.5	3.3	3.0	2.5	1.5
350	**********	4.4	4.2	4.1	3.9	3.8	3.7	3.5	3.3	3.2	3.0	2.7	2.3	1.4
400	**********	4.0	3.8	3.7	3.5	3.3	3.2	3.0	2.9	2.8	2.6	2.4	2.0	1.2
450	**********	3.6	3.5	3.3	3.2	3.0	2.9	2.8	2.7	2.6	2.4	2.2	1.9	1.1
500	**********	3.4	3.3	3.2	2.9	2.8	2.7	2.6	2.5	2.4	2.2	2.0	1.8	1.1
750	**********				2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.6	1.4	0.8
1000	**********											1.6	0.9	

APPENDIX III

OCCUPATIONAL CATEGORIES

Occupational Categories	Standard Codes	Occupational Classification Definition
Management	11	Managerial, Administrative and Related Occupations
Professional	21	Occupations in Natural Sciences, Engineering and Mathematics
	23	Social Sciences and Related Fields
	25	Religion
	27	Teaching and Related Occupations
	31	Medicine & Health
	33	Artistic, Literary and Recreational
Clerical	41	Clerical and Related Occupation
Sales/Service	51	Sales Occupations
	61	Service Occupations
Farming/Processing	71	Farming, Horticultural
	73	Fishing
	75	Forestry
	81/82	Processing Occupations
All Other Occupations	77 & 83/99	All Other Occupational Categories.

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